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From: Seharaseyon, Jegatheesan
Sent: Thursday, August 31, 2006 2:05 PM
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Hi,
Please search SEQ ID NO: 2 in the commerical database.

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Searcher: _____
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Date completed: _____
Searcher Prep Time: _____
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Type of Search
NA# _____ AA# _____
S/L: _____ Oligomer: _____
Encode/Transl: _____
Structure #: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable
STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
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WWW/Internet: _____
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OM protein - protein search, using sw model

Run on: September 1, 2006, 13:18:46 ; Search time 195 Seconds
(without alignments)
391.565 Million cell updates/sec

Title: US-10-650-365A-2

Perfect score: 861

Sequence: 1 MDLQTHSLGNRRALILLA.....EIMRFSLSLTNQLERLRKE 167

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2589679 seqs, 457216429 residues

Total number of hits satisfying chosen parameters: 2589679

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_8.*

- 1: Genesep1980s.*
- 2: Genesep1990s.*
- 3: Genesep2000s.*
- 4: Genesep2001s.*
- 5: Genesep2002s.*
- 6: Genesep2003s.*
- 7: Genesep2003bs.*
- 8: Genesep2004s.*
- 9: Genesep2005s.*
- 10: Genesep2006s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	861	100.0	167	2	AAR11531 Consensus
2	861	100.0	167	8	ADG87759 rSIFN-co.
3	861	100.0	167	8	ADR97080 Consensus
4	861	100.0	167	8	ADR87295 Consensus
5	861	100.0	167	8	ADW88678 Composite
6	861	100.0	167	9	ADX59031 Interfero
7	861	100.0	167	9	ADZ59356 Recombina
8	861	100.0	167	9	AEb53925 Interfero
9	861	100.0	167	10	AEe61639 Human int
10	861	100.0	167	10	AEF91511 Consensus
11	861	100.0	167	10	AEF91468 Consensus
12	861	100.0	167	10	AEf91486 Consensus
13	856	99.4	166	8	ADo32386 Human int
14	856	99.4	166	9	AEb67249 Human int
15	856	99.4	189	10	AEF91512 Interferon
16	856	99.4	189	10	AEF91514 Interferon
17	856	99.4	205	8	ADW64375 Human thy
18	854	99.2	167	2	AAR11532 Consensus
19	854	99.2	167	8	ADW69518 Human int
20	853	99.1	166	8	ADW96575 Protein s
21	853	99.1	167	8	ADW69517 Human int
22	853	99.1	170	8	ADW96753 Human alp
23	852	99.0	167	2	AAR11533 Consensus

ALIGNMENTS

RESULT 1
AAR11531
ID AAR11531 standard; protein; 167 AA.
XX AC AAR11531;
XX AC
DT 25-MAR-2003 (revised)
DT 12-JUN-1991 (first entry)
XX DE Consensus human leucocyte interferon-alphaF #1.

XX KW interferon; IFN; gene manufacture; anti-viral agent.

XX OS Synthetic.

XX PN EP422697-A.

XX PD 17-APR-1991.

XX PF 25-APR-1983; 90EP-00124236.

XX PR 06-MAY-1982; 82US-00375494.

XX PR 15-APR-1983; 83US-00483451.

XX (AMGE-) AMGEN.

XX PI Alton NK, Peters MA, Stabinsky Y, Snitman DL;

XX WPI; 1991-111234/16.

XX N-PSDB; AAQ11283.

XX PT Mfd. structural gene - capable of directing synthesis in a host microorganism of consensus human leukocyte interferon.

XX Claim 3; Page 41; 44pp; English.

XX This sequence corresponds to the consensus IFN-alphaF analogue [Arg22, Ala76, Asp78, Glu79, Tyr86, Tyr90, Leu96, Thr156, Asn157, Leu158] IFN-alphaF. It is encoded by a manufactured gene which was synthesised from at least two linear subunits using a rapid and highly efficient method. The protein and/or antibodies to them can be labelled for use in assays and/or diagnostic test kits. The protein has antiviral activity. See also AAR11532-3. (Updated on 25-MAR-2003 to correct PF field.)

XX Sequence 167 AA;

SQ

Aap30684 Consensus
Adf47855 Human alp
Adv69519 Human int
Adv69755 Human alp
Adv69520 Human int
Aap30685 Consensus
Aap30686 Consensus
Adv96757 Human alp
Adl88898 Human cyt
Aef90856 Interfero
Abg68838 Interfero
Adf30369 Recombina
Aab28176 Human int
Aay44831 Hybrid in
Aag1804 Interfero
Aag1815 Interfero
Adi29643 Human int
Adi29632 Human int
Aag1818 Interfero
Aag1826 Interfero
Aag1795 Interfero
Adi29623 Human int

24 850 98.7 166 1 AAF30684
25 850 98.7 171 7 ADF47855
26 849 98.6 167 8 ADV69519
27 847 98.4 170 8 ADV96755
28 845 98.1 167 8 ADV69520
29 843 97.9 166 1 AAF30685
30 841 97.7 166 1 AAF30686
31 841 97.7 170 8 ADV96757
32 839.5 97.5 165 8 ADL88898
33 839.5 97.5 165 10 AEF90856
34 839 97.4 166 5 ABG68838
35 831 96.5 171 1 ADF30369
36 826 95.9 166 3 AAB28176
37 824 95.7 166 3 AAY44831
38 810 94.1 166 4 AAG61804
39 810 94.1 166 4 AAG61815
40 810 94.1 166 8 ADI29643
41 810 94.1 166 8 ADI29632
42 808 93.8 166 4 AAG61818
43 808 93.8 166 4 AAG61826
44 808 93.8 166 4 AAG61795
45 808 93.8 166 8 ADI29623

Query Match 100.0%; Score 861; DB 2; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEFQKQAKAIVLHE 60
 DB 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEFQKQAKAIVLHE 60

QY 61 MIQOTFNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOGVGVEETPLMNVDSILA 120
 DB 61 MIQOTFNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOGVGVEETPLMNVDSILA 120

QY 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167
 DB 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167

RESULT 2
 ADQ87759
 ID ADQ87759 standard; protein; 167 AA.
 XX
 AC ADQ87759;
 XX
 DT 09-SEP-2004 (first entry)
 XX
 DE rSIFN-co.
 XX
 KW recombinant super-compound interferon; rSIFN-co; viral infection; tumour;
 KW hepatitis A; Hepatitis B; Hepatitis C; hepatitis; Epstein-Barr virus;
 KW Cytomegalovirus; herpes simplex virus; herpes virus; papovavirus;
 KW poxvirus; picornavirus; adenovirus; rhinovirus;
 KW human T cell leukemia virus I; human T cell leukemia virus II;
 KW human T cell leukemia virus III; cancer; skin cancer; liver cancer;
 KW prostate cancer; cervical cancer; Kaposi's sarcoma.
 XX
 OS Synthetic.
 XX
 PN AU2003248419-A1.
 XX
 PD 06-NOV-2003.
 XX
 PF 26-SEP-2003; 2003AU-00248419.
 XX
 PR 26-SEP-2003; 2003AU-00248419.
 XX
 PA (SICH-) SICHUAN BIOTECHNOLOGY RES CENT.
 XX
 PI Zhang R, Guo R, Wei G;
 XX
 DR WPI; 2004-376455/36.
 DR N-PSDB; ADQ87758.
 XX
 PT Novel recombinant super-compound interferon or its functionally
 PT equivalent compound with changed spatial configuration, having improved
 PT efficacy, is useful for treating tumor or viral diseases e.g. Hepatitis
 PT A, Hepatitis B in subject.
 XX
 PS Disclosure; Fig 1; 60pp; English.
 XX
 CC The invention relates to a recombinant super-compound interferon (rSIFN-
 CC co) or a its functionally equivalent compound with changed spatial
 CC configuration, having improved efficacy. rSIFN-co is useful for treating
 CC viral diseases or tumour in a subject, which involves administering rSIFN
 CC -co to the subject in need, where the viral diseases is Hepatitis A,
 CC Hepatitis B, Hepatitis C, other types of hepatitis, infections of viruses
 CC caused by Epstein-Barr virus, Cytomegalovirus, herpes simplex viruses, or
 CC other herpes viruses, papovaviruses, poxviruses, picornaviruses,
 CC adenoviruses, rhinoviruses, human T cell leukemia viruses I, or human T
 CC cell leukemia viruses II or human T cell leukemia virus III. rSIFN-co is
 CC useful for treating cancer such as skin cancer, liver cancer, prostate
 CC cancer, cervical cancer, Kaposi's sarcoma. rSIFN-co has improved anti-
 CC viral or anti-tumour activity. The present sequence represents the amino
 CC acid sequence of rSIFN-co.

XX SQ Sequence 167 AA;
 Query Match 100.0%; Score 861; DB 8; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEFQKQAKAIVLHE 60
 DB 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEFQKQAKAIVLHE 60

QY 61 MIQOTFNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOGVGVEETPLMNVDSILA 120
 DB 61 MIQOTFNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOGVGVEETPLMNVDSILA 120

QY 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167
 DB 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167

RESULT 3
 ADR97080
 ID ADR97080 standard; protein; 167 AA.
 XX
 AC ADR97080;
 XX
 DT 02-DEC-2004 (first entry)
 XX
 DE Consensus interferon-alpha for treating hepatitis C virus infection.
 XX
 KW virucide; hepatitis C virus; infection; interferon-alpha; IFN-alpha;
 KW consensus interferon-alpha; CIFN.
 XX
 OS Unidentified.
 XX
 PN WO2004078127-A2.
 XX
 PD 16-SEP-2004.
 XX
 PF 26-FEB-2004; 2004WO-US006218.
 XX
 PR 28-FEB-2003; 2003US-0451349P.
 XX
 PA (INTE-) INTERMUNE INC.
 XX
 PI Blatt LM, Murphy B;
 XX
 XX WPI; 2004-668485/65.
 DR
 PT Treating hepatitis C virus infection in individual, by administering
 PT interferon-alpha to individual by continuous delivery, for 6 weeks.
 XX
 PS Disclosure; SEQ ID NO 1; 121pp; English.
 XX
 CC The invention relates to a method of treating (M1) hepatitis C virus
 CC infection in individual, by administering interferon (IFN)-alpha to
 CC individual by an initial dosage phase (initial serum concentration
 CC achieved within 12-48 hours) followed by sustained dosage phase
 CC consisting of at least one sustained dosage interval (with first
 CC sustained serum concentration of 80-200% and maintained at steady state
 CC for five days), and where the duration of IFN-alpha therapy is at least 6
 CC weeks. (M1) is useful for treating hepatitis C virus infection in an
 CC individual preferably a human. This sequence corresponds to a consensus
 CC interferon-alpha protein used in the method of the invention.
 XX
 SQ Sequence 167 AA;
 Query Match 100.0%; Score 861; DB 8; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEFQKQAKAIVLHE 60
 DB 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEFQKQAKAIVLHE 60

Db 1 MCDLPQTHSLGNRRALILIAQMRRISPPFSLKDRHDFGFPQEFQKQAKAISVLHE 60
 QY 61 MIQOTNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIGVGVETPLMNVDSILA 120
 Db 61 MIQOTNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIGVGVETPLMNVDSILA 120
 QY 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLTNLQERLRKE 167
 Db 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLTNLQERLRKE 167

RESULT 4
 ADR87295
 ID ADR87295 standard; protein; 167 AA.
 AC ADR87295;
 DT 02-DEC-2004 (first entry)
 XX Consensus interferon IFN-alpha conl sequence, SEQ ID 1.
 XX Virucide; interferon; IFN-alpha; interferon alpha-con 1;
 KW polyethylene glycol; PEG; hepatitis C virus infection ; HCV infection;
 KW antiviral.
 XX Unidentified.
 XX Key Location/Qualifiers
 FT Modified-site 32 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 51 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 72 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 85 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 122 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 123 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 135 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 136 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT Modified-site 166 /note= "Optionally modified with a single polyethylene
 FT glycol (PEG) moiety"
 FT WO2004076474-A2.
 XX PN 10-SEP-2004.
 XX 24-FEB-2004; 2004WO-US005649.
 XX 26-FEB-2003; 2003US-0450587P.
 XX (INTE-) INTERMUNE INC.
 XX Van Vlasselaer P, Roberts MJ, Visor G, Charles SA;
 XX WPI; 2004-676930/66.
 XX Monopegylated consensus interferon molecule useful for treating hepatitis
 PT virus infection comprises a single consensus interferon polypeptide and a
 PT single polyethylene glycol moiety.

XX PS Disclosure; Fig 1; 84pp; English.
 XX CC

CC The present invention relates to a monopegylated consensus interferon
 CC (CIFN) molecule (M1) comprising a single CIFN polypeptide e.g. interferon
 CC alpha-con 1 (the present sequence) and a single polyethylene glycol (PEG)
 CC moiety, where the PEG moiety is linear and 30 kD in molecular weight and
 CC is directly or indirectly attached through a covalent linkage to a lysine
 CC residue in the CIFN polypeptide. The lysine residue is lys32, lys51,
 CC lys72, lys85, lys122, lys123, lys135, lys136 or lys166. The monopegylated
 CC CIFN molecule is useful for treating hepatitis C virus (HCV) infection
 CC since it has superior antiviral activity of IFN-alpha; and has desired
 CC pharmacokinetic properties that will allow for a reduced frequency dosing
 CC regimen with sustained high enough concentrations of the drug in blood
 CC while providing for a reduction in viral load. Also the monopegylated
 CC CIFN molecule shows 20-fold greater antiviral activity than PEGASYS (RTM;
 CC Peg-interferon-alfa2a).

XX SQ Sequence 167 AA;

Query Match 100.0%; Score 861; DB 8; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCDLPQTHSLGNRRALILIAQMRRISPPFSLKDRHDFGFPQEFQKQAKAISVLHE 60
 Db 1 MCDLPQTHSLGNRRALILIAQMRRISPPFSLKDRHDFGFPQEFQKQAKAISVLHE 60
 QY 61 MIQOTNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIGVGVETPLMNVDSILA 120
 Db 61 MIQOTNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIGVGVETPLMNVDSILA 120
 QY 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLTNLQERLRKE 167
 Db 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLTNLQERLRKE 167

RESULT 5

ADW88678
 ID ADW88678 standard; protein; 167 AA.

AC ADW88678;

DT 07-APR-2005 (first entry)

DE Composite interferon protein useful for treating SARS.

XX composite interferon; sars coronavirus infection; infection.

OS Unidentified.

PN CN1478545-A.

XX 03-MAR-2004.

PF 18-JUL-2003; 2003CN-00150139.

PR 18-JUL-2003; 2003CN-00150139.

PA (MICO-) INST MICROBIOLOGY CHINESE ACAD SCI.

PI Gao G, Tang H;

DR WPI; 2004-391111/37.

PT Use of compound interferon in the treating of SARS disease.

PS Claim 1; SEQ ID NO 1; 8pp; Chinese.

XX The invention relates to the application of a composite interferon

CC protein (given as SEQ ID No.1 in the specification) for preparing
 CC medicines for treating SARS. Also described are a medicine containing the
 CC composite interferon and a medical carrier for treating SARS. This

CC sequence represents the composite interferon protein.

XX SQ Sequence 167 AA;
 Query Match 100.0%; Score 861; DB 8; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEEFDGNQFOKAQAISVLHE 60
 DB 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEEFDGNQFOKAQAISVLHE 60
 QY 61 MIQOTFNLFSTKSSAAWDESLEKFTYELYQQLNDLEACVIOGVGVEETPLANNVDSILA 120
 DB 61 MIQOTFNLFSTKSSAAWDESLEKFTYELYQQLNDLEACVIOGVGVEETPLANNVDSILA 120
 QY 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
 DB 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167

RESULT 6

ADXS9031
 ID ADXS9031 standard; protein; 167 AA.
 XX AC ADXS9031;
 XX DT 05-MAY-2005 (first entry)
 XX DE Interferon-alpha consensus sequence.
 XX KW Interferon-alpha; alphavirus infection; hepatitis C virus infection;
 KW West Nile virus infection; virucide; antiinflammatory; hepatotropic;
 KW fibrosis; liver cirrhosis.
 XX OS Synthetic.
 XX PN WO2005013917-A2.
 XX PD 17-FEB-2005.
 XX PF 26-FEB-2004; 2004WO-US005862.
 XX PR 28-FEB-2003; 2003US-0451316P.
 XX PA (INTRE-) INTERMUNE INC.
 XX PI Blatt LM;
 XX DR WPI; 2005-172940/18.
 XX PT Treating hepatitis viral infection and alpha viral infection comprises
 PT administering interferon-alpha and pifrenidone.
 XX PS Disclosure; SEQ ID NO 1; 109pp; English.

CC The present invention provides methods for: treating alphavirus
 CC infections; treating hepatitis C virus (HCV) infections; treating West
 CC Nile virus infection; reducing liver fibrosis; increasing liver function
 CC in an individual suffering from liver cirrhosis; reducing the incidence
 CC of complications associated with HCV and cirrhosis of the liver; and
 CC reducing viral load, or reducing the time to viral clearance, or reducing
 CC morbidity or mortality in the clinical outcome, in patients suffering
 CC from viral infection. The methods involve administering effective amounts
 CC of an interferon-alpha (IFN-alpha) and pifrenidone or its analog in
 CC combination therapy. The IFN-alpha is preferably a consensus interferon,
 CC or is selected from IFN-alpha2a, IFN-alpha2b and IFN-alpha2c. The
 CC combination therapy produces a synergistic effect, a sustained viral
 CC response, and reduces the incidence or severity of side effects
 CC ordinarily experienced in response to IFN-alpha monotherapy for treatment
 CC of alphaviral infection. The present sequence is that of consensus IFN-
 CC alpha, a non-naturally-occurring polypeptide that includes those amino
 CC acid residues that are common to all naturally-occurring human leukocyte

CC IFN-alpha subtype sequences and which includes, at one or more positions
 CC where there is no amino acid common to all subtypes, an amino acid which
 CC predominantly occurs at that position.

XX SQ Sequence 167 AA;
 Query Match 100.0%; Score 861; DB 9; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEEFDGNQFOKAQAISVLHE 60
 DB 1 MCDLPOTHSIGNRRALILLAQMRRISPPSCCLKDRHDFGFPQEEFDGNQFOKAQAISVLHE 60
 QY 61 MIQOTFNLFSTKSSAAWDESLEKFTYELYQQLNDLEACVIOGVGVEETPLANNVDSILA 120
 DB 61 MIQOTFNLFSTKSSAAWDESLEKFTYELYQQLNDLEACVIOGVGVEETPLANNVDSILA 120
 QY 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
 DB 121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167

RESULT 7

ADZ59356
 ID ADZ59356 standard; protein; 167 AA.
 XX AC ADZ59356;
 XX DT 30-JUN-2005 (first entry)
 XX DE Recombinant super-compound interferon (rSIFN-co) protein.
 XX KW severe acute respiratory syndrome; recombinant super-compound interferon;
 KW rSIFN-co; interferon-alpha; IFN-alpha; genetic engineering;
 KW respiratory disease; respiratory tract infection; tumor; hepatitis; cold;
 KW influenza virus infection; cough; respiratory-gen.; antiinflammatory;
 KW hepatotropic; virucide; antitussive; antibacterial; recombinant protein.
 XX OS Homo sapiens.
 XX OS Synthetic.
 XX PN WO2005034853-A2.
 XX PD 21-APR-2005.
 XX PF 26-AUG-2004; 2004WO-US028067.
 XX PR 28-AUG-2003; 2003US-0498449P.
 XX PR 28-AUG-2003; 2003US-0498785P.
 XX PR 28-AUG-2003; 2003US-0498923P.
 XX PR 05-MAR-2004; 2004IN-MU000279.
 XX PR 05-MAR-2004; 2004IN-MU000280.
 XX PA (HUIY-) HUIYANGTECH USA INC.
 XX PI Wei G;
 XX DR WPI; 2005-296199/30.
 XX DR N-PSDB; ADZ59355.
 XX PT Treatment of severe acute respiratory syndrome involves administering a
 PT recombinant super-compound interferon.

XX Example 1; Fig 1; 106pp; English.

XX The invention relates to a method of preventing or treating severe acute
 CC respiratory syndrome by administering a recombinant super-compound
 CC interferon (rSIFN-co) or its functional equivalent. rSIFN-co is a new
 CC interferon molecule constructed according to conservative amino acids in
 CC human interferon-alpha (IFN-alpha) subtype using genetic engineering.
 CC rSIFN-co cDNA is designed according to the codon usage of Escherichia
 CC coli to achieve high expression of rSIFN-co in E. coli. Also described

are: (i) a method of inhibiting the causative agent (preferably virus) of severe acute respiratory syndrome by directly or indirectly contacting the agent with super-compound interferon or its functional equivalent, (ii) inhibiting severe acute respiratory syndrome virus or severe acute respiratory syndrome virus-infected cells involving contacting super-compound interferon with the virus or cells, (iii) a pharmaceutical composition comprising the recombinant super-compound interferon capable of inhibiting severe acute respiratory syndrome virus or severe acute respiratory syndrome virus-infected cells and a carrier, and (iv) a device to deliver the composition. The rSIFN-co is useful for preventing or treating severe acute respiratory syndrome in a patient (preferably human) and for inhibiting severe acute respiratory syndrome virus or severe acute respiratory syndrome virus-infected cells. It is also useful for treating virus-induced upper respiratory diseases, tumors, hepatitis infections, cold, influenza and cough. The invention provides a method for preventing or treating severe acute respiratory syndrome not only by inhibiting DNA duplication of hepatitis B virus but also the secretion of HBsAg and HBeAg. This sequence represents rSIFN-co protein.

XX SQ Sequence 167 AA;

Query Match 100.0%; Score 861; DB 9; Length 167;
Best Local Similarity 100.0%; Pred. No. 3.7e-78;
Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 MCDLPQTHSLGNRRALILLAQWRRISPFSCDKRDHDFGFPQEEFGNPFQKAQAI SVLHE 60

1 MCDLPQTHSLGNRRALILLAQWRRISPFSCDKRDHDFGFPQEEFGNPFQKAQAI SVLHE 60

61 MIQQTFFNLFSKDSAAWDESLLEKFFYTYLYQQLNDLEACVIEQVGVEETPLMNVDSILA 120

61 MIQQTFFNLFSKDSAAWDESLLEKFFYTYLYQQLNDLEACVIEQVGVEETPLMNVDSILA 120

121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQELRRKE 167

121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQELRRKE 167

RESULT 8

AEBS3925

ID AEB53925 standard; protein; 167 AA.

XX AC AEB53925;

XX DT 06-OCT-2005 (first entry)

XX DE Interferon-alpha conl protein sequence, SEQ ID NO 1.

XX viral infection; virucide; interferon-alpha; IFN-alpha; cancer;
KW cytostatic; IFN-gamma receptor agonist; TNF antagonist;
KW hepatitis C virus infection; antiinflammatory; hepatotropic;
KW adenocarcinoma; chronic lymphocytic leukemia;
KW acute lymphoblastic leukemia; acute myelogenous leukemia;
KW pulmonary fibrosis; respiratory-gen.; fibrosis;
KW polycystic kidney disease; fabry disease; metabolic; liver cirrhosis;
KW scleroderma; dermatological; alzheimers disease; neurotropic;
KW neuroprotective.

XX OS Homo sapiens.

XX PN WO2005067963-A1.

XX 28-JUL-2005.

XX 24-FEB-2004; 2004WO-US005594.

XX 23-DEC-2003; 2003US-0532695P.

XX (INTS-) INTERMUNE INC.

XX Blatt LM, Van Vlasselaer P, Ruegg C, Hsu HH;

XX WPI; 2005-563877/57.

XX

PT Treating virus infection in individual, involves administering mono

XX polyethylene glycolylated consensus interferon alpha to individual.

PS Disclosure; SEQ ID NO 1; 176pp; English.

XX

CC The present invention relates to treating (M1) a virus infection in an

CC individual, by administering mono polyethylene glycol (PEG) (30 kD,

CC linear)-ylated consensus interferon-alpha (IFN-alpha). Also claimed is a

CC method of treating (M2) cancer, by administering monoPEG (30 kD, linear)-

CC ylated consensus IFN-alpha; and treating (M3) a fibrotic disease, by

CC administering a combination of monoPEG (30 kD, linear)-ylated consensus

CC IFN-alpha, and IFN-gamma in amounts that are effective in the treatment

CC or prophylaxis of the fibrotic disease in the individual. (M1) further

CC involves administering ribavirin, IFN-gamma, pirfenidone, or tumor

CC necrosis factor (TNF) antagonist. The TNF antagonist is chosen from

CC ENBREL etanercept, REMICADE infliximab, and HUMIRA adalimumab. (M3)

CC further involves administering a TNF antagonist. (M1) is useful for

CC treating hepatitis C virus infection. (M2) is useful for treating cancer

CC such as adenocarcinoma, embryonal carcinoma, testicular carcinoma,

CC osteogenic carcinoma, chronic lymphocytic leukemia, acute lymphoblastic

CC leukemia, acute myelogenous leukemia. (M3) is useful for treating a

CC fibrotic disease, such as idiopathic pulmonary fibrosis, liver fibrosis

CC or renal fibrosis. (M3) is useful for treating fibrosis disorders such as

CC intestinal lung disease, polycystic kidney disease, fabry's disease,

CC liver cirrhosis, scleroderma, Grave's ophthalmopathy, Alzheimer's disease,

CC myocardial fibrosis, etc. The present sequence is interferon-alpha conl

XX protein sequence.

XX SQ Sequence 167 AA;

Query Match 100.0%; Score 861; DB 9; Length 167;

Best Local Similarity 100.0%; Pred. No. 3.7e-78;

Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCDLPQTHSLGNRRALILLAQWRRISPFSCDKRDHDFGFPQEEFGNPFQKAQAI SVLHE 60

1 MCDLPQTHSLGNRRALILLAQWRRISPFSCDKRDHDFGFPQEEFGNPFQKAQAI SVLHE 60

61 MIQQTFFNLFSKDSAAWDESLLEKFFYTYLYQQLNDLEACVIEQVGVEETPLMNVDSILA 120

61 MIQQTFFNLFSKDSAAWDESLLEKFFYTYLYQQLNDLEACVIEQVGVEETPLMNVDSILA 120

121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQELRRKE 167

121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQELRRKE 167

RESULT 9

AE61639

ID AEB61639 standard; protein; 167 AA.

XX AC AEB61639;

XX 09-FEB-2006 (first entry)

XX Human interferon-alpha consensus protein - SEQ ID 58.

XX protein engineering; virucide; antiinflammatory; hepatotropic; anti-HIV;

XX gene therapy; cytostatic; viral infection; hepatitis C virus infection;

XX hepatitis B virus infection; HIV infection; hairy cell leukemia;

XX melanoma; nodular lymphoma; non-Hodgkin's lymphoma; bladder tumor;

XX acquired immune deficiency syndrome; crohns disease;

XX cell differentiation; interferon-alpha.

XX OS Homo sapiens.

XX Synthetic.

XX US2005266465-A1.

XX 01-DEC-2005.

XX 18-MAY-2005; 2005US-00132722.

PR 09-AUG-2004; 2004US-0600134P.
 PR 09-AUG-2004; 2004US-0600202P.
 PR 24-AUG-2004; 2004US-0604280P.
 PR 24-AUG-2004; 2004US-0604415P.

XX (INTE-) INTERMUNE INC.

XX Hong J, Seiwert SD, Blatt LM;
 PI

XX WPI; 2006-174126/18.

XX New oral pharmaceutical composition comprising protease-resistant,
 PT hyperglycosylated polypeptide variant of a parent protein therapeutic.
 PT

XX Disclosure; Fig 24; 306pp; English.

XX The invention describes an oral pharmaceutical composition comprising a
 CC protease-resistant, hyperglycosylated polypeptide variant of a parent
 CC protein therapeutic in a first unit form, and pharmaceutical excipient
 CC suitable for oral delivery. Also described are: a method of treating a
 CC disease in a patient comprising: administering orally to the patient the
 CC oral pharmaceutical composition; a synthetic Type I interferon receptor
 CC polypeptide agonist; a polynucleotide comprising a nucleotide sequence
 CC encoding a synthetic Type I interferon receptor polypeptide agonist; an
 CC expression vector comprising the polynucleotide operably linked to a
 CC promoter functional in a eukaryotic cell; and a host cell comprising the
 CC polynucleotide or expression vector. The oral pharmaceutical composition
 CC is useful for treating a disease, e.g. autoimmune diseases. This is the
 CC amino acid sequence of consensus interferon agent infergen.

XX Sequence 167 AA;

Query Match 100.0%; Score 861; DB 10; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 MCDLPQTHSLGNRRALILLAQWRISPSCLKDRHDFGFPQEFPGNFOFKAQAISVLHE 60
 Db 1 MCDLPQTHSLGNRRALILLAQWRISPSCLKDRHDFGFPQEFPGNFOFKAQAISVLHE 60
 Qy 61 MIQOTFNLFSKDSAAWDESILKEFYTELQQLNDLEACVIOEVGVETPLMNVDSILA 120
 Db 61 MIQOTFNLFSKDSAAWDESILKEFYTELQQLNDLEACVIOEVGVETPLMNVDSILA 120
 Qy 121 VKKYFQRITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
 Db 121 VKKYFQRITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167

RESULT 12
 AEF91486
 ID AEF91486 standard; protein; 167 AA.
 XX
 XX AC AEF91486;

XX 20-APR-2006 (first entry)

XX Consensus interferon agent Infergen.

XX immunosuppressive; pharmaceutical; therapeutic; glycosylation;
 KW protein therapy; autoimmune disease; immune disorder; infergen.
 XX
 XX OS Synthetic.

XX WO2006020580-A2.

XX 23-FEB-2006.

XX 08-AUG-2005; 2005WO-US028165.

XX 09-AUG-2004; 2004US-0600134P.

XX 09-AUG-2004; 2004US-0600202P.

XX 24-AUG-2004; 2004US-0604280P.

PR 24-AUG-2004; 2004US-0604415P.

XX (INTE-) INTERMUNE INC.

XX Hong J, Seiwert SD, Blatt LM;
 PI

XX WPI; 2006-174126/18.

XX N-PSDB; AEF91485.

XX New oral pharmaceutical composition comprising protease-resistant,
 PT hyperglycosylated polypeptide variant of a parent protein therapeutic.
 PT

XX Disclosure; Fig 26; 306pp; English.

XX The invention describes an oral pharmaceutical composition comprising a
 CC protease-resistant, hyperglycosylated polypeptide variant of a parent
 CC protein therapeutic in a first unit form, and pharmaceutical excipient
 CC suitable for oral delivery. Also described are: a method of treating a
 CC disease in a patient comprising: administering orally to the patient the
 CC oral pharmaceutical composition; a synthetic Type I interferon receptor
 CC polypeptide agonist; a polynucleotide comprising a nucleotide sequence
 CC encoding a synthetic Type I interferon receptor polypeptide agonist; an
 CC expression vector comprising the polynucleotide operably linked to a
 CC promoter functional in a eukaryotic cell; and a host cell comprising the
 CC polynucleotide or expression vector. The oral pharmaceutical composition
 CC is useful for treating a disease, e.g. autoimmune diseases. This is the
 CC amino acid sequence of consensus interferon agent infergen.

XX Sequence 167 AA;

Query Match 100.0%; Score 861; DB 10; Length 167;
 Best Local Similarity 100.0%; Pred. No. 3.7e-78;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 MCDLPQTHSLGNRRALILLAQWRISPSCLKDRHDFGFPQEFPGNFOFKAQAISVLHE 60
 Db 1 MCDLPQTHSLGNRRALILLAQWRISPSCLKDRHDFGFPQEFPGNFOFKAQAISVLHE 60
 Qy 61 MIQOTFNLFSKDSAAWDESILKEFYTELQQLNDLEACVIOEVGVETPLMNVDSILA 120
 Db 61 MIQOTFNLFSKDSAAWDESILKEFYTELQQLNDLEACVIOEVGVETPLMNVDSILA 120
 Qy 121 VKKYFQRITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
 Db 121 VKKYFQRITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167

RESULT 13
 ADO32386
 ID ADO32386 standard; protein; 166 AA.
 XX
 XX AC ADO32386;

XX 26-AUG-2004 (first entry)

XX Human interferon alpha Con1 protein SeqID 43.

XX human; interferon alpha; IFN; antiviral; immunomodulatory; cytokine;
 KW cellular proliferation; autoimmune disorder; inflammatory disorder;
 KW viral infection.
 XX
 XX OS Homo sapiens.

XX WO2004046365-A2.

XX 03-JUN-2004.

XX 17-NOV-2003; 2003WO-US036682.

XX 18-NOV-2002; 2002US-0427612P.

XX 12-SEP-2003; 2003US-0502560P.

XX (MAXY-) MAXYGEN INC.

XX Patten PA, Govindarajan S, Viswanathan S;
XX WPI; 2004-431982/40.
XX Novel isolated or recombinant interferon alpha polypeptide exhibiting
XX antiviral activity, useful as medicament for inhibiting replication of
XX hepatitis C virus or hepatitis B virus in cells infected with virus.
XX Example 2; SEQ ID NO 43; 256pp; English.
XX This invention relates to novel isolated or recombinant interferon (IFN)
XX alpha proteins and conjugates thereof that comprise attachment groups for
XX non-protein moieties. Specifically, it provides the nucleic acids that
XX encode these IFN-alpha proteins and which exhibit enhanced antiviral and
XX immunomodulatory activities. The present invention describes IFN-alpha
XX proteins as members of the cytokine family that inhibit a variety of
XX cellular proliferation, autoimmune and inflammatory disorders as well as
XX viral infections. Accordingly, they can be used in the development of
XX medicaments for inhibiting viral replication in cells infected with a
XX virus or reducing the number of viral copies, particularly where the
XX virus is hepatitis C virus (HCV) or hepatitis B virus (HBV). In addition,
XX it can be used to produce antibodies for the diagnosis and treatment of
XX viral infections. This polypeptide sequence is a human interferon-alpha
XX Con1 protein of the invention.
XX Sequence 166 AA;

Query Match 99.4%; Score 856; DB 8; Length 166;
Best Local Similarity 100.0%; Pred. No. 1.2e-77;
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSLCKDRHDPFGFPQEFQKQAKAISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMRRISPPFSLCKDRHDPFGFPQEFQKQAKAISVLHEM 60
QY 62 IQOTFNLSTKDSAAWDSLEKPYTLYQQLNDLEACVIOEVGVETPLANNVDSILAV 121
DB 61 IQOTFNLSTKDSAAWDSLEKPYTLYQQLNDLEACVIOEVGVETPLANNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
DB 121 KKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 166

RESULT 14
AED67249
ID AED67249 standard; protein; 166 AA.
XX AED67249;
XX 12-JAN-2006 (first entry)
XX Human interferon-alpha-2a partial polypeptide SEQ ID NO:25.
XX interferon-alpha; endocrine-gen.; osteopathic; ophthalmological;
XX cytostatic; vasotropic; therapeutic.
XX Homo sapiens.
XX US2005220762-A1.
XX 06-OCT-2005.
XX 28-JAN-2005; 2005US-00046440.
XX 02-FEB-2004; 2004US-0541528P.
XX 18-JUN-2004; 2004US-0580885P.
XX 18-JUN-2004; 2004US-0581175P.
XX 18-JUN-2004; 2004US-0581314P.
XX 22-DEC-2004; 2004US-0638616P.
XX (AMBR-) AMBRX INC.

XX Cho HS, Daniel TO, Hays A, Wilson TE;
XX WPI; 2005-777263/79.
XX New human interferon polypeptide, useful for treating a disease, e.g.
XX gigantism, acromegaly, vascular eye disease, macular degeneration, or
XX sarcomas.
XX Example 11; SEQ ID NO 25; 129pp; English.
XX The invention relates to a novel human interferon (hIFN) polypeptide
XX comprising one or more non-naturally encoded amino acids. A hIFN
XX polypeptide of the invention has endocrine-gen., osteopathic,
XX ophthalmological, cytostatic, and vasotropic activity. The hIFN comprises
XX a sequence of 165 amino acids (AED67248) encoded by a nucleic acid
XX comprising a nucleotide sequence of 567 or 498 bp (AED67250 or AED67251).
XX The polypeptide, nucleic acid, composition, and method are useful for
XX treating a disease, e.g. gigantism, acromegaly, vascular eye disease,
XX macular degeneration, or sarcomas. The present sequence represents a
XX partial human interferon-alpha-2a polypeptide of the invention.
XX Sequence 166 AA;
Query Match 99.4%; Score 856; DB 9; Length 166;
Best Local Similarity 100.0%; Pred. No. 1.2e-77;
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSLCKDRHDPFGFPQEFQKQAKAISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMRRISPPFSLCKDRHDPFGFPQEFQKQAKAISVLHEM 60
QY 62 IQOTFNLSTKDSAAWDSLEKPYTLYQQLNDLEACVIOEVGVETPLANNVDSILAV 121
DB 61 IQOTFNLSTKDSAAWDSLEKPYTLYQQLNDLEACVIOEVGVETPLANNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
DB 121 KKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 166
RESULT 15
AEF91512
ID AEF91512 standard; protein; 189 AA.
XX AEF91512;
XX 20-APR-2006 (first entry)
XX Interferon-IFN-alpha 14 signal peptide fusion protein.
XX immunosuppressive; pharmaceutical; therapeutic; glycosylation;
XX protein therapy; autoimmune disease; immune disorder; interferon;
XX interferon alpha 14; IFN-alpha 14.
XX Homo sapiens.
XX Synthetic.
XX WO2006020580-A2.
XX 23-FEB-2006.
XX 08-AUG-2005; 2005WO-US028165.
XX 09-AUG-2004; 2004US-0600134P.
XX 09-AUG-2004; 2004US-0600202P.
XX 24-AUG-2004; 2004US-0604280P.
XX 24-AUG-2004; 2004US-0604415P.
XX (INTE-) INTERMUNE INC.
XX Hong J, Seiwert SD, Blatt LM;
XX

DR WPI; 2006-174126/18.
XX PT New oral pharmaceutical composition comprising protease-resistant,
XX PT hyperglycosylated polypeptide variant of a parent protein therapeutic.
XX PS
XX PS Disclosure; Fig 30; 306pp; English.
XX
CC The invention describes an oral pharmaceutical composition comprising a
CC protease-resistant, hyperglycosylated polypeptide variant of a parent
CC protein therapeutic in a first unit form, and pharmaceutical excipient
CC suitable for oral delivery. Also described are: a method of treating a
CC disease in a patient comprising: administering orally to the patient the
CC oral pharmaceutical composition; a synthetic Type I Interferon receptor
CC polypeptide agonist; a polynucleotide comprising a nucleotide sequence
CC encoding a synthetic Type I interferon receptor polypeptide agonist; an
CC expression vector comprising the polynucleotide operably linked to a
CC promoter functional in a eukaryotic cell; and a host cell comprising the
CC polynucleotide or expression vector. The oral pharmaceutical composition
CC is useful for treating a disease, e.g. autoimmune diseases. This is the
CC amino acid sequence of consensus interferon agent infergen fused to the
CC signal peptide from human interferon alpha 14 (IFN-alpha 14).
XX
SQ Sequence 189 AA;
Query Match 99.4%; Score 856; DB 10; Length 189;
Best Local Similarity 100.0%; Pred. NO. 1.4e-77;
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMRRIISPFCLKDRHDFGPFQEEFDGNGFQKQAQAIISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAQMRRIISPFCLKDRHDFGPFQEEFDGNGFQKQAQAIISVLHEM 83
QY 62 IQQTFNLFSTKDSAAWDESLLEKFTYELYQQLNDEACVIOEVGVEETPLMNVDSILAV 121
DB 84 IQQTFNLFSTKDSAAWDESLLEKFTYELYQQLNDEACVIOEVGVEETPLMNVDSILAV 143
QY 122 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLTNLOERLRKE 167
DB 144 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLTNLOERLRKE 189

Search completed: September 1, 2006, 13:22:10
Job time : 197 secs

GenCore version 5.1.9
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OM protein - protein search, using sw model

Run on: September 1, 2006, 13:22:29 ; Search time 39 Seconds
(without alignments)
412.005 Million cell updates/sec

Title: US-10-650-365A-2
Perfect score: 861
Sequence: 1 MCDLPQTHSLGNRRALLIA.....EIMRFSLSLTNLOERLRKE 167

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	804	93.4	167	E25843	interferon alpha-F
2	801	93.0	181	E56313	interferon alpha-2
3	801	93.0	189	IVHUA7	interferon alpha-5
4	801	93.0	189	D44464	interferon-alpha-F
5	799	92.8	189	IVHUF	interferon alpha-I
6	797	92.6	167	D25843	interferon alpha-G
7	788	91.5	189	IVHUA8	interferon alpha-I
8	786	91.3	189	I52347	interferon alpha-M
9	785	91.2	176	E56314	interferon-alpha -
10	780	90.6	189	I51970	interferon precurs
11	776	90.1	189	IVHUA5	interferon alpha-5
12	768	89.2	189	IVHUA14	interferon alpha-I
13	767	89.1	189	IVHUA9	interferon alpha-J
14	760	88.3	189	I53102	interferon-alpha-J
15	759	88.2	167	F25843	interferon alpha-J
16	754	87.6	189	IVHUA0	interferon alpha-7
17	753	87.5	189	IVHUI6	interferon alpha-I
18	747.5	86.8	165	I78570	alpha 2 interferon
19	747	86.8	189	IVHUA1	interferon alpha-1
20	744.5	86.5	188	IVHUA2	interferon alpha-2
21	744	86.4	189	IVHUI6	interferon alpha-I
22	738	85.7	189	I37584	IFN-alpha-N-protei
23	734	85.2	189	IVHUI8	interferon alpha-I
24	719	83.5	162	C25843	interferon alpha-B
25	714	82.9	189	IVHUA4	interferon alpha-4
26	674	78.3	184	IVHOA2	interferon alpha-I
27	670	77.8	184	IVHOA2	interferon alpha-I
28	669	77.7	184	IVHOA1	interferon alpha-I
29	669	77.7	184	IVHOA3	interferon alpha-I

```

30 628 72.9 189 2 S23709 interferon alpha-1
31 574 66.7 189 1 IVMSA5 interferon alpha-I
32 569 66.1 189 1 IVBO11 interferon alpha-I
33 569 66.1 189 1 IVBO1B interferon alpha-I
34 568 66.0 189 1 IVMSA1 interferon alpha-I
35 564 65.5 189 1 IVBO1D interferon alpha-I
36 562 65.3 190 2 I49774 alpha-interferon -
37 561 65.2 189 1 IVBO1A interferon alpha-I
38 557 64.7 189 1 IVBO1C interferon alpha-7
39 549 63.8 190 2 I49772 interferon alpha-I
40 542 63.0 190 2 A24401 interferon alpha-I
41 542 63.0 192 1 IVRTAL interferon alpha-8
42 537 62.4 190 2 I49775 interferon alpha-2
43 535 62.1 190 1 IVMSA2 interferon alpha-1
44 523 60.7 190 2 JH0468 interferon alpha-1
45 519 60.3 189 1 IVMSA6 interferon alpha-I

```

ALIGNMENTS

RESULT 1

E25843
interferon alpha-F - human
N/Alternate names: human leukocyte interferon (IFN)
C/Species: Homo sapiens (man)
C/Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change 09-Jul-2004
C/Accession: E25843
R/Ohara, O.; Teraoka, H.
FEBS Lett. 211, 78-82, 1987
A/Title: Anomalous behavior of human leukocyte interferon subtypes on polyacrylamide ge.
A/Reference number: A91374; MUID:87105954; PMID:3803589
A/Accession: E25843
A/Status: nucleic acid sequence not shown; not compared with conceptual translation
A/Molecule type: mRNA
A/Residues: 1-167 <OH>
A/Cross-references: UNIPROT:Q14608; UNIPARC:UPI0000176711
C/Superfamily: interferon alpha

Query Match 93.4%; Score 804; DB 2; Length 167;

Best Local Similarity 94.0%; Pred. No. 4.4e-65;

Matches 157; Conservative 3; Mismatches 7; Indels 0; Gaps 0;

QY 1 MCDLPQTHSLGNRRALLIAOMRRISPPFSLCKRDHDFGPPQEFQGNQFQKQAISVLHE 60

DB 1 MCDLPQTHSLGNRRALLIAOMGRISPPFSLCKRDHDFGPPQEFQGNQFQKQAISVLHE 60

QY 61 MIQQTFFNLFTSKDSSAAWDESLLEKPYTLYQQLNDLEACVIOEVGVETPLMNVDSILA 120

DB 61 MIQQTFFNLFTSKDSSATWEQSLLEKPYTLYQQLNDMEACVIOEVGVETPLMNVDSILA 120

QY 121 VKKYFQRTLYLTKKYSFCAWEVVRRAETMRFSLSLTNLOERLRKE 167

DB 121 VKKYFQRTLYLTKKYSFCAWEVVRRAETMRFSLSLTNLOERLRKE 167

RESULT 2

I56313
interferon alpha 21 - human
C/Species: Homo sapiens (man)
C/Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C/Accession: I56313
R/Gren, E.; Berzin, V.M.; Jansone, I.; Tsmanis, A.; Vishnevsky, Y.; Apsalons, U.
J. Interferon Res. 4, 609-617, 1984
A/Title: Novel human leukocyte interferon subtype and structural comparison of alpha in
A/Reference number: I56313; MUID:85056523; PMID:6548765
A/Accession: I56313
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: mRNA
A/Residues: 1-181 <RES>
A/Cross-references: UNIPROT:Q14608; UNIPARC:UPI000006E7D8; GB:M28586; NID:g184636; PIDN
C/Genetics:
A/Gene: GDB:IFNA21

A;Cross-references: GDB:136360; OMIM:147584
A;Map position: 9p22-9p22
C;Superfamily: interferon alpha

Query Match 93.0%; Score 801; DB 2; Length 181;
Best Local Similarity 94.6%; Pred. No. 9.1e-65;
Matches 157; Conservative 2; Mismatches 7; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 61
DB 16 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 75

QY 62 IQOTFNLFSKDSAAWDESLLEKFTYELYQQLNDLEACVQIEVGVEETPLMNVDSILAV 121
DB 76 IQOTFNLFSKDSATWEQSLLEKFTYELYQQLNDLEACVQIEVGVEETPLMNVDSILAV 135

QY 122 KYFQRTITLYLTKKYSFPCAWVVRABIMRSFSLSTNLQERLRKE 167
DB 136 KYFQRTITLYLTKKYSFPCAWVVRABIMRSFSLSKIFQERLRKE 181

RESULT 3
IVHUA7
Interferon alpha-5 precursor - human
N;Alternate names: interferon alpha-G
C;Species: Homo sapiens (man)
C;Date: 01-Sep-1981 #sequence_revision 29-Jan-1999 #text_change 09-Jul-2004
C;Accession: S43716; A01833
R;Henco, K.; Brosius, J.; Fujisawa, A.; Fujisawa, J.I.; Haynes, J.R.; Hochstadt, J.; Kov
J. Mol. Biol. 185, 227-260, 1985
A;Title: Structural relationship of human interferon alpha genes and pseudogenes.
A;Reference number: A92316; MUID:86037205; PMID:4057246
A;Accession: S43716
A;Molecule type: DNA
A;Residues: 1-189 <HEN>
A;Cross-references: UNIPROT:P01569; UNIPARC:UPI0000047760; EMBL:X02956; NID:g32659; PIDN
R;Goeddel, D.V.; Leung, D.W.; Dull, T.J.; Gross, M.; Lawn, R.M.; McCandliss, R.; Seebur
Nature 290, 20-26, 1981
A;Title: The structure of eight distinct cloned human leukocyte interferon cDNAs.
A;Reference number: A93249; MUID:81148795; PMID:6163083
A;Accession: A01833
A;Molecule type: mRNA
A;Residues: 57-189 <GOE>
A;Cross-references: UNIPARC:UPI0000141F44; GB:V00541; GB:J00213; NID:g32718; PIDN:CAA238
A;Note: eight classes of interferon alpha clones were identified; this sequence is deriv
C;Genetics:
A;Gene: GDB:IFNA5
A;Cross-references: GDB:136362; OMIM:147565
A;Map position: 9p22-9p22
C;Superfamily: interferon alpha
C;Keywords: antiviral; cytokine; leukocyte
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-189/Product: interferon alpha-5 #status predicted <MAT>

Query Match 93.0%; Score 801; DB 1; Length 189;
Best Local Similarity 91.0%; Pred. No. 9.6e-65;
Matches 151; Conservative 9; Mismatches 6; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 83

QY 62 IQOTFNLFSKDSAAWDESLLEKFTYELYQQLNDLEACVQIEVGVEETPLMNVDSILAV 121
DB 84 IQOTFNLFSKDSATWEQSLLEKFTYELYQQLNDLEACVQIEVGVEETPLMNVDSILAV 143

QY 122 KYFQRTITLYLTKKYSFPCAWVVRABIMRSFSLSTNLQERLRKE 167
DB 144 KYFQRTITLYLTKKYSFPCAWVVRABIMRSFSLSANQERLRKE 189

RESULT 4
184464

interferon-alpha-F - human
C;Species: Homo sapiens (man)
C;Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 09-Jul-2004
C;Accession: I84464; I37583
R;Gren, E.I.; Berzin, V.M.; Teimanis, A.Y.; Apsalon, U.R.; Vishnevskii, Y.I.; Yansone, I
A.; Lozha, V.P.; Kavsan, V.M.; Blimov, V.A.; Sverdlov, E.D.
Dokl. Biochem. 269, 91-95, 1983
A;Title: A new type of leukocytic interferon.
A;Reference number: I37583
A;Accession: I84464
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-189 <RES>
A;Cross-references: UNIPROT:P01568; UNIPARC:UPI000002C35A; GB:M12350; NID:g184598; PIDN
A;Accession: I37583
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-189 <RE2>
A;Cross-references: UNIPARC:UPI000002C35A; EMBL:X00145; NID:g32724; PIDN:CAA24980.1; PYI
C;Genetics:
A;Gene: IFNA
C;Superfamily: interferon alpha

Query Match 93.0%; Score 801; DB 2; Length 189;
Best Local Similarity 94.6%; Pred. No. 9.6e-65;
Matches 157; Conservative 2; Mismatches 7; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 83

QY 62 IQOTFNLFSKDSAAWDESLLEKFTYELYQQLNDLEACVQIEVGVEETPLMNVDSILAV 121
DB 84 IQOTFNLFSKDSATWEQSLLEKFTYELYQQLNDLEACVQIEVGVEETPLMNVDSILAV 143

QY 122 KYFQRTITLYLTKKYSFPCAWVVRABIMRSFSLSTNLQERLRKE 167
DB 144 KYFQRTITLYLTKKYSFPCAWVVRABIMRSFSLSKIFQERLRKE 189

RESULT 5

IVHUF
Interferon alpha-I-F precursor - human
N;Alternate names: HuIFN-alpha-I-F; IeIF F; type I interferon
C;Species: Homo sapiens (man)
C;Date: 01-Sep-1981 #sequence_revision 01-Sep-1981 #text_change 09-Jul-2004
C;Accession: A01832
R;Goeddel, D.V.; Leung, D.W.; Dull, T.J.; Gross, M.; Lawn, R.M.; McCandliss, R.; Seebur
Nature 290, 20-26, 1981
A;Title: The structure of eight distinct cloned human leukocyte interferon cDNAs.
A;Reference number: A93249; MUID:81148795; PMID:6163083
A;Accession: A01832
A;Molecule type: mRNA
A;Residues: 1-189 <GOE>
A;Cross-references: UNIPROT:P01568; UNIPARC:UPI0000047762; GB:V00540; GB:J00212; NID:g3
A;Note: eight classes of interferon alpha clones were identified; this sequence is deri
C;Genetics:
A;Gene: GDB:IFN1@
A;Cross-references: GDB:119328; OMIM:147660
A;Map position: 9p22-9p22
C;Superfamily: interferon alpha
C;Keywords: antiviral
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-189/Product: interferon alpha-I-F #status predicted <MAT>
F;24-122,52-162/Disulfide bonds: #status predicted

Query Match 92.8%; Score 799; DB 1; Length 189;
Best Local Similarity 94.0%; Pred. No. 1.5e-64;
Matches 156; Conservative 3; Mismatches 7; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAAQMRISPPSCCLKDRHDFGFPQEEFDGNGQFOKQAQAIISVLHEM 83

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QY 62 IQQTNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 84 IQQTNLFSTKSSATWESQLEKFTSTELNQQLNDMEACVIOEVGVETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
DB 144 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSKIFQERLRKE 189

RESULT 6
interferon alpha-G - human
N:Alternate names: human leukocyte interferon (IFN)
C:Species: Homo sapiens (man)
C:Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change 15-Jun-1996
C:Accession: D25843
R:Ohara, O.; Teraoka, H.
FBS Lett. 211, 78-82, 1987
A:Title: Anomalous behavior of human leukocyte interferon subtypes on polyacrylamide gel
A:Reference number: A91374; MUID:87105954; PMID:3803589
A:Accession: D25843
A:Status: nucleic acid sequence not shown; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-167 <OHA>
A:Cross-references: UNIPARC:UPI0000176717
C:Superfamily: interferon alpha

Query Match 92.6%; Score 797; DB 2; Length 167;
Best Local Similarity 91.0%; Pred. No. 1.9e-64; Mismatches 6; Indels 0; Gaps 0;
Matches 152; Conservative 9;

QY 1 MCDLPQTHSLGNRRALILLAQMRRISPPFCLKDRHDFGPPQEEFDGQFQKAQAISVLHE 60
DB 1 MCDLPQTHSLNRRITLMIWAQGRISPPFCLKDRHDFGPPQEEFDGQFQKAQAISVLHE 60

QY 61 MIQOTFNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
DB 61 MIQOTFNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILAV 120

QY 121 VKKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
DB 121 VRKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSANLQERLRKE 167

RESULT 7
interferon alpha-I-4b precursor - human
N:Alternate names: HuIFN-alpha-I-4b; type I interferon
C:Species: Homo sapiens (man)
C:Date: 28-Dec-1987 #sequence_revision 28-Dec-1987 #text_change 09-Jul-2004
C:Accession: E23753
R:Henco, K.; Brosius, J.; Fujisawa, A.; Fujisawa, J.I.; Haynes, J.R.; Hochstadt, J.; Kov
J. Mol. Biol. 185, 227-260, 1985
A:Title: Structural relationship of human interferon alpha genes and pseudogenes.
A:Reference number: A92916; MUID:86037205; PMID:4057246
A:Accession: E23753
A:Molecule type: DNA
A:Residues: 1-189 <HEN>
A:Cross-references: UNIPROT:P05014; UNIPARC:UPI0000047761; GB:X02955; NID:G32656; PIDN:O
C:Genetics:
A:Gene: GDB:IFN1@
A:Cross-references: GDB:119328; OMIM:147660
A:Map position: 9p22-9p22
C:Superfamily: interferon alpha
C:Keywords: antiviral
P:1-23/Domain: signal sequence #status predicted <SIG>
P:24-189/Product: interferon alpha-I-4b #status predicted <MAT>
P:24-122,52-162/Diulfide bonds: #status predicted

Query Match 91.5%; Score 788; DB 1; Length 189;
Best Local Similarity 91.6%; Pred. No. 1.4e-63; Mismatches 6; Indels 0; Gaps 0;
Matches 152; Conservative 8;

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QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFCLKDRHDFGPPQEEFDGQFQKAQAISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAQMGRISHPFCLKDRHDFGPPQEEFDGQFQKAQAISVLHEM 83

QY 62 IQQTNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 84 IQQTNLFSTEDSSAAWDSLEKFTSTELNQQLNDLEACVIOEVGVETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
DB 144 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSTNLQKRLRRKD 189

RESULT 8
interferon alpha-Mi precursor - human
C:Species: Homo sapiens (man)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I52347
R:Linnane, A.W.; Beilharz, M.W.; McMullen, G.L.; Macreadie, I.G.; Murphy, M.; Nisbet, I
Biochem. Int. 8, 725-732, 1984
A:Title: Nucleotide sequence and expression in E. coli of a human interferon-alpha gene
A:Reference number: I52347; MUID:84307815; PMID:6089830
A:Accession: I52347
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-189 <RES>
A:Cross-references: UNIPROT:P05014; UNIPARC:UPI000002BA77; GB:M27318; NID:G184617; PIDN
C:Genetics:
A:Gene: IFNA
C:Superfamily: interferon alpha

Query Match 91.3%; Score 786; DB 2; Length 189;
Best Local Similarity 91.6%; Pred. No. 2.1e-63; Mismatches 6; Indels 0; Gaps 0;
Matches 152; Conservative 8;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFCLKDRHDFGPPQEEFDGQFQKAQAISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAQMGRISHPFCLKDRHDFGPPQEEFDGQFQKAQAISVLHEM 83

QY 62 IQQTNLFSTKSSAAWDSLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 84 IQQTNLFSTEDSSAAWDSLEKFTSTELNQQLNDLEACVIOEVGVETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
DB 144 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSFSLSTNLQKRLRRKD 189

RESULT 9
interferon-alpha - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I56314
R:Lund, B.; von Gabain, A.; Edlund, T.; Ny, T.; Lundgren, E.
J. Interferon Res. 5, 229-238, 1985
A:Title: Differential expression of interferon genes in a substrain of Namalwa cells.
A:Reference number: I56314; MUID:85235859; PMID:4008999
A:Accession: I56314
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-176 <RES>
A:Cross-references: UNIPROT:P01571; UNIPARC:UPI000002C74E; GB:M71246; NID:G184572; PIDN
C:Genetics:
A:Gene: IFNA
C:Superfamily: interferon alpha

Query Match 91.2%; Score 785; DB 2; Length 176;
Best Local Similarity 91.0%; Pred. No. 2.4e-63; Mismatches 151; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

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QY 2 CDLPQTHSLGNRRALILLQAOMRRISPFSCDKDRHDFGFPQEFQDGNQFQKQAISVLHEM 61
 Db 11 CDLPQTHSLGNRRALILLQAOMRRISPFSCDKDRHDFGFPQEFQDGNQFQKQAISVLHEM 70
 QY 62 IQOTFNLFSTKSSAANDDESILKFTYELQYQNDLEACVIOEVGVETPLANNVDSILAV 121
 Db 71 IQOTFNLFSTEDSSAAWEQSLLEKFTSTELYQQLNDLEACVIOEVGVETPLANNVDSILAV 130
 QY 122 KYFORITLYLTKKYSKPCAWVVRVRAEIMRSFSLTNLQERLRKX 167
 Db 131 KYFORITLYLTKKYSKPCAWVVRVRAEIMRSFSLTNLQERLRKX 176

RESULT 10
 IYHU14
 Interferon precursor - human
 C:Species: Homo sapiens (man)
 C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 16-Jul-1999
 C:Accession: U151970
 R:Savelliev, V.I.; Zlochevsky, M.L.; Sorokin, A.V.; Naroditskaya, V.A.; Bolotin, A.P.; De
 Antibiot. Med. Biotechnol. 31, 592-596, 1986
 A:Title: Cloning and the determination of the nucleotide sequences in 2 genes of human
 A:Reference number: I51970; MUID:87024453; PMID:3767336
 A:Accession: I51970
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-189 <RES>
 A:Cross-references: UNIPARC:UPI000016AB15; GB:M38289; NID:g186407; PIDN:AAA59165.1; PID:
 C:Genetics:
 A:Gene: IFNA
 C:Superfamily: interferon alpha

Query Match 90.6%; Score 780; DB 2; Length 189;
 Best Local Similarity 90.4%; Pred. No. 7 4e-63;
 Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLQAOMRRISPFSCDKDRHDFGFPQEFQDGNQFQKQAISVLHEM 61
 Db 24 CDLPQTHSLGNRRALILLQAOMRRISPFSCDKDRHDFGFPQEFQDGNQFQKQAISVLHEM 83
 QY 62 IQOTFNLFSTKSSAANDDESILKFTYELQYQNDLEACVIOEVGVETPLANNVDSILAV 121
 Db 84 IQOTFNLFSTEDSSAAWEQSLLEKFTSTELYQQLNDLEACVIOEVGVETPLANNVDSILAV 143
 QY 122 KYFORITLYLTKKYSKPCAWVVRVRAEIMRSFSLTNLQERLRKX 167
 Db 144 KYFORITLYLTKKYSKPCAWVVRVRAEIMRSFSLTNLQERLRKX 189

RESULT 11
 IYHU15
 Interferon alpha-5 precursor - human
 C:Species: Homo sapiens (man)
 C>Date: 01-Sep-1981 #sequence_revision 01-Sep-1981 #text_change 09-Jul-2004
 C:Accession: A60937; A01830
 R:Bartholomew, C.; Windass, J.D.
 J. Interferon Res. 9, 407-417, 1989
 A:Title: Identification of a functional allele of a human interferon-alpha gene previous
 A:Reference number: A60937; MUID:89328015; PMID:2526839
 A:Accession: A60937
 A:Molecule type: DNA
 A:Residues: 1-189 <BAR>
 A:Cross-references: UNIPROT:P01566; UNIPARC:UPI0000047765
 A>Note: this genomic sequence, SMIII.1A, encodes a functional allele for alpha interfer
 ence and is a pseudogene
 R:Goeddel, D.V.; Leung, D.W.; Dull, T.J.; Gross, M.; Lawn, R.M.; McCandless, R.; Seeburg
 Nature 290, 20-26, 1981
 A:Title: The structure of eight distinct cloned human leukocyte interferon cDNAs.
 A:Reference number: A93249; MUID:81148795; PMID:6163083
 A:Accession: A01830
 A:Molecule type: mRNA
 A:Residues: 1-189 <GOE>
 A:Cross-references: UNIPARC:UPI0000047765; GB:V00551; GB:J00209; NID:g32748; PIDN:CAA23B

A>Note: eight classes of interferon alpha clones were identified; this sequence is deriv
 C:Genetics:
 A:Gene: GDB:IFNA5
 A:Cross-references: GDB:136362; OMIM:147565
 A:Map position: 9p22-9p22
 C:Superfamily: interferon alpha
 C:Superfamily: leukocyte
 C:Keywords: signal sequence #status predicted <SIG>
 P:1-23/Domain: interferon alpha-5 #status predicted <MAT>
 P:24-189/Product: interferon alpha-5 #status predicted
 P:24-122,52-162/Disulfide bonds: #status predicted

Query Match 90.1%; Score 776; DB 1; Length 189;
 Best Local Similarity 90.4%; Pred. No. 1.7e-62;
 Matches 150; Conservative 7; Mismatches 9; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLQAOMRRISPFSCDKDRHDFGFPQEFQDGNQFQKQAISVLHEM 61
 Db 24 CDLPQTHSLGNRRALILLQAOMRRISPFSCDKDRHDFGFPQEFQDGNQFQKQAISVLHEM 83
 QY 62 IQOTFNLFSTKSSAANDDESILKFTYELQYQNDLEACVIOEVGVETPLANNVDSILAV 121
 Db 84 IQOTFNLFSTEDSSAAWEQSLLEKFTSTELYQQLNDLEACVIOEVGVETPLANNVDSILAV 143
 QY 122 KYFORITLYLTKKYSKPCAWVVRVRAEIMRSFSLTNLQERLRKX 167
 Db 144 KYFORITLYLTKKYSKPCAWVVRVRAEIMRSFSLTNLQERLRKX 189

RESULT 12
 IYHU14
 Interferon alpha-1-14 precursor (validated) - human
 N:Alternate names: HuIFN-alpha-1-14; lambda-2-h; type I interferon
 C:Species: Homo sapiens (man)
 C>Date: 01-Sep-1981 #sequence_revision 01-Sep-1981 #text_change 09-Jul-2004
 C:Accession: A92916; A93255; B93249; PC2203; A01834; C23753
 R:Henco, K.; Broslus, J.; Fujisawa, A.; Fujisawa, J.I.; Haynes, J.R.; Hochstadt, J.; Ko
 J. Mol. Biol. 185, 227-260, 1985
 A:Title: Structural relationship of human interferon alpha genes and pseudogenes.
 A:Reference number: A92916; MUID:86037205; PMID:4057246
 A:Accession: A92916
 A:Molecule type: DNA
 A:Residues: 1-189 <HEN>
 A:Cross-references: UNIPROT:P01570; UNIPARC:UPI00000541D5; GB:X02959; NID:g32650; PIDN:
 R:Lawn, R.M.; Adelman, J.; Dull, T.J.; Gross, M.; Goeddel, D.; Ullrich, A.
 Science 212, 1159-1162, 1981
 A:Title: DNA sequence of two closely linked human leukocyte interferon genes.
 A:Reference number: A94255; MUID:81201124; PMID:6165082
 A:Accession: A94255
 A:Molecule type: DNA
 A:Residues: 1-189 <LAW>
 A:Cross-references: UNIPARC:UPI00000541D5; GB:V00533; GB:J00215; NID:g32635; PIDN:CAA23:
 R:Goeddel, D.V.; Leung, D.W.; Dull, T.J.; Gross, M.; Lawn, R.M.; McCandless, R.; Seebur
 Nature 290, 20-26, 1981
 A:Title: The structure of eight distinct cloned human leukocyte interferon cDNAs.
 A:Reference number: A93249; MUID:81148795; PMID:6163083
 A:Accession: B93249
 A:Molecule type: mRNA
 A:Residues: 1-174,'P',176-189 <GOE>
 A:Cross-references: UNIPARC:UPI0000047764; GB:V00542; GB:J00214; NID:g32720; PIDN:CAA23:
 A>Note: a variant sequence differs from that shown in having 175-Phe, 182-Lys, and 184-
 R:Shirono, H.; Koga, J.; Uemura, H.; Matsuo, A.
 Biosci. Biotechnol. Biochem. 58, 1714-1715, 1994
 A:Title: Identification of glycosylated subtypes of interferon-alpha produced by human
 A:Reference number: PC2203; MUID:95036878; PMID:7765487
 A:Accession: PC2203
 A:Molecule type: protein
 A:Residues: 'X',25-43 <SHI>
 A:Cross-references: UNIPARC:UPI000017365E
 A:Experimental source: leukocyte
 C:Genetics:
 A:Gene: GDB:IFNA14
 A:Cross-references: GDB:136356; OMIM:147579
 A:Map position: 9p22-9p22

C:Superfamily: interferon alpha
C:Keywords: antiviral; glycoprotein
F:1-23/Domain: signal sequence #status predicted <SIG>
F:24-189/Product: interferon alpha-I-14 #status experimental <MAT>
F:24-122,52-162/Disulfide bonds: #status predicted
F:25,95/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 89.2%; Score 768; DB 1; Length 189;
Best Local Similarity 88.6%; Pred. No. 8.8e-62;
Matches 147; Conservative 10; Mismatches 9; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHEM 61
DB 24 CMLSTHSLNRRRTLLMLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHEM 83

QY 62 IQOTFNLFTSKDSSAAWDESLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 121
DB 84 MQOTFNLFTSKNSSAAWDETLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSKPCAEVVRVRAEIMRSPSLSTNLQERLRKE 167
DB 144 KKYFORITLYLTKKYSKPCAEVVRVRAEIMRSLSFSTNLQKLRKRD 189

Query Match 89.1%; Score 767; DB 1; Length 189;
Best Local Similarity 89.8%; Pred. No. 1.1e-61;
Matches 149; Conservative 8; Mismatches 9; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHEM 83

QY 62 IQOTFNLFTSKDSSAAWDESLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 121
DB 84 IQOTFNLFTSKDSSAAWDESLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSKPCAEVVRVRAEIMRSPSLSTNLQERLRKE 167
DB 144 KKYFORITLYLTKKYSKPCAEVVRVRAEIMRSLSFSTNLQKLRKRD 189

RESULT 14
153102
interferon-alpha-J1 - human
C:Species: Homo sapiens (man)
C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I53102
R:Cohen, S.; Veilan, B.; Grosfeld, H.; Shalita, Z.; Leitner, M.; Shafferman, A.
Dev. Biol. Stand. 60, 111-122, 1985
A:Title: Cloning, expression and biological activity of a new variant of human interferon
A:Reference number: I53102; MUID:86005847; PMID:2995168
A:Accession: I53102
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-189 <RES>
A:Cross-references: UNIPROT:P01567; UNIPARC:UPI0000161BA7; GB:M34913; NID:g184614; PIDN:
C:Superfamily: interferon alpha

Query Match 88.3%; Score 760; DB 2; Length 189;
Best Local Similarity 88.6%; Pred. No. 4.6e-61;
Matches 147; Conservative 10; Mismatches 9; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHEM 83

QY 62 IQOTFNLFTSKDSSAAWDESLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 121
DB 84 IQOTFNLFTSKDSSAAWDESLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSKPCAEVVRVRAEIMRSPSLSTNLQERLRKE 167
DB 144 KKYFORITLYLTKKYSKPCAEVVRVRAEIMRSPSLSTNLKGLRKKD 189

RESULT 15
F25843
interferon alpha-J - human
N:Alternate names: human leukocyte interferon (IFN)
C:Species: Homo sapiens (man)
C>Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change 15-Jun-1996
C:Accession: F25843
R:Ohara, O.; Teraoka, H.
FEBS Lett. 211, 78-82, 1987
A:Title: Anomalous behavior of human leukocyte interferon subtypes on polyacrylamide gel
A:Reference number: A91374; MUID:87105954; PMID:3803589
A:Accession: F25843
A:Status: nucleic acid sequence not shown; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-167 <OHA>
A:Cross-references: UNIPARC:UPI0000176718
C:Superfamily: interferon alpha

Query Match 88.2%; Score 759; DB 2; Length 167;
Best Local Similarity 88.0%; Pred. No. 4.9e-61;
Matches 147; Conservative 10; Mismatches 10; Indels 0; Gaps 0;

QY 1 MCDLPQTHSLGNRRALILLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHE 60
DB 1 MCDLPQTHSLGNRRALILLQAMRRISPFSCDKRDHDFGPPQEFDFGNQFOKAQAISVLHE 60

QY 61 MIQOTFNLFTSKDSSAAWDESLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILA 120
DB 61 MIQOTFNLFTSKDSSAAWDESLLEKFTYLYQQLNDLEACVIOEVGVVEETPLMNVDSILA 120

QY 121 VVKYFORITLYLTKKYSPCAMEVVRRAEIMRSFSLSTNLQERLRKB 167
Db 121 VVKYFORITLYLMEKKYSPCAMEVVRRAEIMRSFSLSTNLKGLRRKD 167

Search completed: September 1, 2006, 13:27:57
Job time : 39 secs

Protein Sequence Searches - February 2005

All of the sequence databases on ABSS have recently been updated.

- Please note that the curators of the UniProt database have purged some temporary accession numbers from the most recent version of UniProt. These sequences have been assigned new permanent accession numbers. The new UniProt record may not contain the previous temporary accession number.

- If you encounter an accession number from an older search run against UniProt (results file extension .rnp) that can no longer be found in the database, the permanent record with the new accession number can be found by searching the old accession number in the UniProt Protein Archive database (UniPARC) at:

<http://www.pir.uniprot.org/database/archive.shtml>

If you have any questions regarding this information or your results, please contact any STIC searcher.

When submitting sequence search results for scanning into IFW, please include a copy of this attachment to assist any future Examiners or members of the public who may encounter UniProt temporary accession numbers.

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OM protein - protein search, using sw model

Run on: September 1, 2006, 13:19:08 ; Search time 298 Seconds
(without alignments)
518.381 Million cell updates/sec

Title: US-10-650-365A-2

Perfect score: 861

Sequence: 1 MCDLPQTHSLGNRRALILLA.....EIMRFSLSLNLQERLRKE 167

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2849598 seqs, 925015592 residues

Total number of hits satisfying chosen parameters: 2849598

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Uniprot_7.2.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result # No.	Score	Query Match	Length	DB	ID	Description
1	801	93.0	181	2	Q14608_HUMAN	Q14608 homo sapien
2	801	93.0	189	1	IFN21_HUMAN	P01568 homo sapien
3	801	93.0	189	1	IFNA5_HUMAN	P01569 homo sapien
4	801	93.0	189	2	Q521X3_HUMAN	Q521X3 homo sapien
5	801	93.0	189	2	Q5VWD1_HUMAN	Q5VWD1 homo sapien
6	786	91.3	189	1	IFNA4_HUMAN	P05014 homo sapien
7	786	91.3	189	2	Q5VV15_HUMAN	Q5VV15 homo sapien
8	777	90.2	189	1	IFN17_HUMAN	P01571 homo sapien
9	777	90.2	189	2	Q5VZ53_HUMAN	Q5VZ53 homo sapien
10	776	90.1	189	1	IFN10_HUMAN	P01566 homo sapien
11	776	90.1	189	2	Q5V13_HUMAN	Q5V13 homo sapien
12	768	89.2	189	1	IFN14_HUMAN	P01570 homo sapien
13	768	89.2	189	2	Q5V256_HUMAN	Q5V256 homo sapien
14	754	87.6	189	1	IFNA7_HUMAN	P01567 homo sapien
15	754	87.6	189	2	Q5VV14_HUMAN	Q5VV14 homo sapien
16	753	87.5	189	1	IFNA6_HUMAN	P05013 homo sapien
17	753	87.5	189	2	Q5VYQ1_HUMAN	Q5VYQ1 homo sapien
18	752.5	87.4	166	2	Q860P4_HUMAN	Q860P4 homo sapien
19	747.5	86.8	188	2	Q6DXX8_HUMAN	Q6DXX8 homo sapien
20	747	86.8	189	1	IFNA1_HUMAN	P01562 homo sapien
21	747	86.8	189	2	Q2M1L8_HUMAN	Q2M1L8 homo sapien
22	747	86.8	189	2	Q521B8_HUMAN	Q521B8 homo sapien
23	744.5	86.5	188	1	IFNA2_HUMAN	P01563 homo sapien
24	744	86.4	189	1	IFN16_HUMAN	P05015 homo sapien
25	744	86.4	189	2	Q5VV12_HUMAN	Q5VV12 homo sapien
26	743	86.3	189	2	Q95J78_SAGOE	Q95J78 saguinus oe
27	738	85.7	189	2	Q14618_HUMAN	Q14618 homo sapien
28	736	85.5	166	2	Q8WZ68_HUMAN	Q8WZ68 homo sapien
29	734	85.2	189	1	IFNA8_HUMAN	P32881 homo sapien
30	734	85.2	189	2	Q5VYQ3_HUMAN	Q5VYQ3 homo sapien
31	721	83.7	189	2	Q95J77_SAGOE	Q95J77 saguinus oe

32	699	81.2	174	2	Q8MJT1_SAISC	Q8MJT1 saimiri sci
33	692.5	80.4	154	2	Q6QNB6_HUMAN	Q6QNB6 homo sapien
34	674	78.3	184	1	IFNA4_HORSE	P05006 equus cabal
35	670	77.8	184	1	IFNA2_HORSE	P05004 equus cabal
36	669	77.7	184	1	IFNA1_HORSE	P05003 equus cabal
37	669	77.7	184	1	IFNA3_HORSE	P05005 equus cabal
38	643	74.7	166	2	Q5U8T2_PIG	Q5U8T2 sus scrofa
39	638	74.1	166	2	Q5U8T1_PIG	Q5U8T1 sus scrofa
40	629	73.1	189	2	Q304W3_PIG	Q304W3 sus scrofa
41	628	72.9	189	1	IFNA1_PIG	P49879 sus scrofa
42	628	72.9	189	2	Q304V9_PIG	Q304V9 sus scrofa
43	625	72.6	166	2	Q5U8T3_PIG	Q5U8T3 sus scrofa
44	625	72.6	189	2	Q6VAB8_PIG	Q6VAB8 sus scrofa
45	622	72.2	166	2	Q7YRK3_PIG	Q7YRK3 sus scrofa

ALIGNMENTS

RESULT 1

Q14608_HUMAN
ID Q14608_HUMAN PRELIMINARY; PRT; 181 AA.
AC Q14608;
DT 01-NOV-1996, integrated into UniProtKB/TrEMBL.
DT 01-NOV-1996, sequence version 1.
DT 21-FEB-2006, entry version 27.
DE Leukocyte interferon-alpha.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=85056523; PubMed=6548765;
RA Gren E., Barzin V.M., Jansone I., Tsimanis A., Vishnevsky Y.,
RA Apsalons U.;
RT "Novel human leukocyte interferon subtype and structural comparison of
RT alpha interferon genes.";
RL J. Interferon Res. 4:609-617(1984).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=87105954; PubMed=3803589; DOI=10.1016/0014-5793(87)81278-4;
RA Ohara O., Tersoka H.;
RT "Anomalous behavior of human leukocyte interferon subtypes on
RT polyacrylamide gel electrophoresis in the presence of dodecyl
sulfate.";
RL FEBS Lett. 211:78-82(1987).
CC -!- SUBCELLULAR LOCATION: Secreted protein (By similarity).
CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
CC Distributed under the Creative Commons Attribution-NoDerivs License

EMBL: M28586; AAA36041.1; -, mRNA.

PIR: E25843; E25843.

PIR: I56313; I56313.

HSSP: P01563; IITP.

SMR: Q14608; 16-181.

Ensembl: ENSG00000137080; Homo sapiens.

GO: GO:0005615; Extracellular space; IEA.

GO: GO:0005126; Fimnapototin/interferon-class (D200-domain. . .; IEA.

GO: GO:0006952; P:response to virus; IEA.

GO: GO:0009615; P:response to virus; IEA.

InterPro: IPR000471; Interferon_abd.

PANTHER: PTHR11691; Interferon_abd; 1.

Pfam: PF00143; Interferon; 1.

PRINTS: PR00286; INTERFERONAB.

ProDom: PD000550; Interferon_abd; 1.

SMART: SM00076; IFABD; 1.

PROSITE: PS00252; INTERFERON_A_B_D; 1.

Antiviral defense; Cytokine.

SEQUENCE 181 AA; 20878 MW; 3DB45120764EBABC CRC64;

Query Match 93.0%; Score 801; DB 2; Length 181;
 Best Local Similarity 94.6%; Pred. No. 1.1e-60;
 Matches 157; Conservative 2; Mismatches 7; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAAQMRISPFSLCKDRHDFGFPQEEFGDGNQFOKAQAISVLHEM 61
 DB 16 CDLPQTHSLGNRRALILLAAQMRISPFSLCKDRHDFGFPQEEFGDGNQFOKAQAISVLHEM 75
 QY 62 IQOTNLNLSSTKSSAAWDSLEKFKTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
 DB 76 IQOTNLNLSSTKSSAAWDSLEKFKTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 135
 QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 167
 DB 136 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 181

RESULT 2
 ID IFN21 HUMAN STANDARD; PRT; 189 AA.
 AC P01568;
 DT 21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
 DT 16-APR-2002, sequence version 2.
 DT 07-FEB-2006, entry version 62.
 DE Interferon alpha-21 precursor (interferon alpha-F) (LeIF F).
 GN Name=IFNA21;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homnidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1] NUCLEOTIDE SEQUENCE [MRNA].
 RX MEDLINE=81148795; PubMed=6163083;
 RA Coeddel D.V., Leung D.W., Dull T.J., Gross M., Lawn R.M.,
 RA McCandless R., Seeburg P.H., Ullrich A., Yelverton E., Gray P.W.;
 RT "The structure of eight distinct cloned human leukocyte interferon
 RT cDNAs".
 RL Nature 290:20-26(1981).
 RN [2] NUCLEOTIDE SEQUENCE [MRNA].
 RP Gren E.Y., Berzin V.M., Tsimanis A.Y., Apsalon U.R., Vishnevskii Y.I.,
 RA Yansone I.V., Dishler A.V., Pudova N.V., Smorodintsev A.A.,
 RA Iovlev V.I., Stepanov A.N., Feldman G.Y., Meldraiz Y.A., Lozha V.P.,
 RA Kavaan V.M., Efimov V.A., Sverdlov E.D.;
 RT "A new type of leukocytic interferon".
 RL Dokl. Biochem. 263:91-95(1983).
 RN [3] NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
 RP MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RX Strausberg R.L., Feingold E.A., Grouse L.H., Bertje J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton L., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Rana S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skaleka U., Smailus D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences".
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [4] PROTEIN SEQUENCE OF 24-58.
 RP MEDLINE=98087498; PubMed=9425112;

RA Nyman T.A., Toeloe H., Parkkinen J., Kalkkinen N.;
 RT "Identification of nine interferon-alpha subtypes produced by Sendai
 RT virus-induced human peripheral blood leucocytes.";
 RL Biochem. J. 329:295-302(1998).
 RN [5] ABSENCE OF POLYMORPHISM.
 RX MEDLINE=97067358; PubMed=8910771;
 RA Hussain M., Gill D.S., Liao M.-J.;
 RT "Identification of interferon-alpha 7, -alpha 14, and -alpha 21
 RT variants in the genome of a large human population.";
 RL J. Interferon Cytokine Res. 16:853-859(1996).
 CC -!- FUNCTION: Produced by macrophages, IFN-alpha have antiviral
 CC activities. Interferon stimulates the production of two enzymes: a
 CC protein kinase and an oligoadenylate synthetase.
 CC -!- SUBCELLULAR LOCATION: Secreted protein.
 CC -!- SIMILARITY: Belongs to the alpha/beta interferon family.
 CC
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 CC -----
 CC EMBL: M12350; AAA52718.1; -; mRNA.
 DR EMBL: V00540; CAA23801.1; -; mRNA.
 DR EMBL: X00145; CAA24980.1; -; mRNA.
 DR EMBL: BC069329; AAH69329.1; -; mRNA.
 DR EMBL: BC069372; AAH69372.1; -; mRNA.
 DR EMBL: BC069408; AAH69408.1; -; mRNA.
 DR PIR: A01832; IVHUF.
 DR PIR: I84464; I84464.
 DR HSP: P01563; IITF.
 DR SMR: P01568; 24-189.
 DR ENSEMBL: ENSG00000137080; Homo sapiens.
 DR HGNC: HGNC:5424; IFNA21.
 DR MIM: 147584; gene.
 DR LinkHub: P01568; -;
 DR GO: GO:0005126; P:hematopoietin/interferon-class (D200-domain. .; TAS.
 DR InterPro: IPR000471; Interferon_abd.
 DR PANTHER: PTHR11691; Interferon_abd; 1.
 DR Pfam: PF00143; Interferon; 1.
 DR PRINTS: PR00266; INTERPERONAB.
 DR ProDom: PD000550; Interferon_abd; 1.
 DR SMART: SM00076; IFabd; 1.
 DR PROSITE: PS00352; INTERFERON_A_B_D; 1.
 KW Antiviral defense; Cytokine; Direct protein sequencing; Signal.
 FT SIGNAL 1 23
 FT CHAIN 24 189 Interferon alpha-21.
 FT DISULFID 24 122 /FTID=PRO 0000016370.
 FT DISULFID 52 162 By similarity.
 FT CONFLICT 119 119 L -> M (in Ref. 1).
 SQ SEQUENCE 189 AA; 21741 MW; F0B6C9C392905802 CRC64;

Query Match 93.0%; Score 801; DB 1; Length 189;
 Best Local Similarity 94.6%; Pred. No. 1.2e-60;
 Matches 157; Conservative 2; Mismatches 7; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAAQMRISPFSLCKDRHDFGFPQEEFGDGNQFOKAQAISVLHEM 61
 DB 24 CDLPQTHSLGNRRALILLAAQMRISPFSLCKDRHDFGFPQEEFGDGNQFOKAQAISVLHEM 83
 QY 62 IQOTNLNLSSTKSSAAWDSLEKFKTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
 DB 84 IQOTNLNLSSTKSSAAWDSLEKFKTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 143
 QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 167
 DB 144 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 189

RESULT 3
 ID IFNA5 HUMAN STANDARD; PRT; 189 AA.
 AC P01569;
 DT 21-JUL-1986, integrated into UniProtKB/Swiss-Prot.

DT 13-AUG-1987, sequence version 1.
 DE 07-FEB-2006, entry version 57.
 DE Interferon alpha-5 precursor (Interferon alpha-G) (Leif G) (Interferon
 DE alpha-61).
 GN Name=IFNA5;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RX MEDLINE=86037205; PubMed=4057246;
 RA Henco K., Brosius J., Fujisawa A., Fujisawa J., Haynes J.R.,
 RA Hochstadt J., Kovacic T., Pasek M., Schamboeck A., Schmid J.,
 RA Tokokoro K., Waelchli M., Nagata S., Wellesmann C.;
 RT "Structural relationship of human interferon alpha genes and
 RT pseudogenes";
 RL J. Mol. Biol. 185:227-260 (1985).
 RN [2]
 RP NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].
 RX PubMed=15164053; DOI=10.1038/nature02465;
 RA Humphray S.J., Oliver K., Hunt A.R., Plumb R.W., Loveland J.E.,
 RA Howe K.L., Andrews T.D., Searle S., Hunt S.E., Scott C.E., Jones M.C.,
 RA Ainscough R., Almeida J.P., Ambrose K.D., Ashwell R.I.S.,
 RA Babbage A.K., Babbage S., Bagguley C.L., Bailey J., Banerjee R.,
 RA Barker D.J., Barlow K.F., Bates K., Beasley H., Beasley O., Bird C.P.,
 RA Bray-Allen S., Brown A.J., Brown J.Y., Burford D., Burrill W.,
 RA Burton J., Carder C., Carter N.P., Chapman J.C., Chen Y., Clarke G.,
 RA Clark S.Y., Clee C.M., Clegg S., Collier R.E., Corby N., Crosier M.,
 RA Cummings A.T., Davies J., Dhani P., Dunn M., Dutta I., Dyer L.W.,
 RA Earthrowl M.B., Paulkner L., Fleming C.J., Frankish A.,
 RA Frankland J.A., French L., Fricker D.G., Garner P., Garnett J.,
 RA Ghori J., Gilbert J.G.R., Gimson C., Graham D.V., Gribble S.,
 RA Griffiths C., Griffiths-Jones S., Grocock R., Guy J., Hall R.E.,
 RA Hammond S., Harley J.L., Harrison E.S.I., Hart E.A., Heath P.D.,
 RA Henderson C.D., Hopkins B.L., Howard P.J., Howden P.J., Huckie E.,
 RA Johnson C., Johnson D., Joy A.A., Kay M., Keenan S., Kershaw J.K.,
 RA Kimberley A.M., King A., Knights A., Laird G.K., Langford C.,
 RA Lawlor S., Leongamornlert D.A., Leversha M., Lloyd C., Lloyd D.M.,
 RA Lovell J., Martin S., Mashreghi-Mohammadi M., Matthews L., McLaren S.,
 RA McLay K.B., McMurray A., Milne S., Nickerson T., Nisbett J.,
 RA Nordliek G., Pearce A.V., Peck A.I., Porter K.M., Pandian R.,
 RA Pellan S., Phillimore B., Povey S., Ramsey Y., Rand V., Scharfe M.,
 RA Sehra H.K., Showkeen R., Sims S.K., Skuce C.D., Smith M.,
 RA Steward C.A., Swarbreck D., Sycamore N., Tester J., Thorpe A.,
 RA Tracey A., Tromans A., Thomas D.W., Wall M., Wallis J.M., West A.P.,
 RA Whitehead S.B., Willey D.L., Williams S.A., Wilming L., Wray P.W.,
 RA Young L., Ashurst J.L., Coulson A., Blocker H., Durbin R.,
 RA Sulston J.E., Hubbard T., Jackson M.J., Bentley D.R., Beck S.,
 RA Rogers J., Dunham I.;
 RT "DNA sequence and analysis of human chromosome 9";
 RL Nature 429:369-374 (2004).
 RN [3]
 RP NUCLEOTIDE SEQUENCE OF 57-189.
 RC TISSUE=Spleen;
 RX MEDLINE=81148795; PubMed=6163083;
 RA Geddel D.V., Leung D.W., Dull T.J., Gross M., Lawn R.M.,
 RA McCandless R., Seeburg P.H., Ullrich A., Yelverton E., Gray P.W.;
 RT "The structure of eight distinct cloned human leukocyte interferon
 RT cDNAs";
 RL Nature 290:20-26 (1981).
 RN [4]
 RP PROTEIN SEQUENCE OF 22-36.
 RX PubMed=15340161; DOI=10.1110/ps.04682504;
 RA Zhang Z., Henzel W.J.;
 RT "Signal peptide prediction based on analysis of experimentally
 RT verified cleavage sites";
 RL Protein Sci. 13:2819-2824 (2004).
 CC -1- FUNCTION: Produced by macrophages, IFN-alpha have antiviral
 CC activities. Interferon stimulates the production of two enzymes: a
 CC protein kinase and an oligoadenylate synthetase.
 CC -1- SUBCELLULAR LOCATION: Secreted protein.

CC -1- SIMILARITY: Belongs to the alpha/beta interferon family.
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 CC -----
 DR EMBL: X02956; CAA26702.1; -, Genomic DNA.
 DR EMBL: ALA62420; CAH73189.1; -, Genomic DNA.
 DR EMBL: V00541; CAA23802.1; -, mRNA.
 DR PIR: S43716; IVHUA7.
 DR HSP: P01563; 1ITP.
 DR SRS: P01569; 24-189.
 DR EMBL: ENSG00000147873; Homo sapiens.
 DR HGNC: HGNC:5426; IFNA5.
 DR MIM: 147565; gene.
 DR LinkHub: P01569; -.
 DR GO: GO:0005126; F:hematopoietin/interferon-class (D200-domain. . .); TAS.
 DR InterPro: IPR000471; Interferon abd.
 DR PANTHER: PTHR11691; Interferon_abd; 1.
 DR Pfam: PF00143; Interferon; 1.
 DR PRINTS: PD00266; INTERFERONAB.
 DR PRODOM: PD000550; Interferon_abd; 1.
 DR SMART: SM00076; IFabd; 1.
 DR PROSITE: PS00252; INTERFERON A B D; 1.
 KW Antiviral defense; Cytokine; Direct protein sequencing; Signal.
 FT SIGNAL 1 21
 FT CHAIN 22 189 Interferon alpha-5.
 FT DISULFID 24 122 By similarity.
 FT DISULFID 52 162 By similarity.
 SQ SEQUENCE 189 AA; 21942 MW; C605992FE2E78043 CRC64;
 Query Match 93.0%; Score 801; DB 1; Length 189;
 Best Local Similarity 91.0%; Pred. No. 1.2e-60;
 Matches 151; Conservative 9; Mismatches 6; Indels 0; Gaps 0;
 Qy 2 CDLPQTHSLGNRRALILLAAQNRISPFSCLDKRDHDFGQPEEPGNGQPKQAQISVLHEM 61
 Db 24 CDLPQTHSLSNRRRTLMTMAQNGRISPFSCLDKRDHDFGQPEEPGNGQPKQAQISVLHEM 83
 Qy 62 IQQTENLFSFKDSSAAWDESLLEKFFYELYYQLNDLEACVIOEVGVETPLMNVDSILAV 121
 Db 84 IQQTENLFSFKDSSAAWDESLLEKFFYELYYQLNDLEACVIOEVGVETPLMNVDSILAV 143
 Qy 122 KYQFQRTILYLTCKYSPCAWEVVRVRAEIMRFSLSLTLQRLRKE 167
 Db 144 KYQFQRTILYLTCKYSPCAWEVVRVRAEIMRFSLSLTLQRLRKE 189
 RESULT 4
 Q52LX3 HUMAN PRELIMINARY; PRT; 189 AA.
 ID Q52LX3 HUMAN PRELIMINARY; PRT; 189 AA.
 AC Q52LX3.
 DT 24-MAY-2005, integrated into UniProtKB/TrEMBL.
 DT 21-FEB-2006, entry version 1.
 DE Interferon, alpha 5.
 GN Name=IFNA5;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Brain;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altshul S.F., Zeeberg B., Buetow K.H., Schaefer C.P., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heieh P.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,
 RA Brownstein M.J., Ustin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Pahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.",
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP TISSUE=Brain;
RC NIH MGC Project;
RG Submitted (APR-2005) to the EMBL/GenBank/DBJ databases.
CC -1- SUBCELLULAR LOCATION: Secreted protein (By similarity).
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CC
CC EMBL; BC093757; AAH93757.1; -; mRNA.
DR EMBL; BC093755; AAH93755.1; -; mRNA.
DR SMR; Q52LX3; 24-189.
DR Ensembl; ENSG00000147873; Homo sapiens.
DR GO; GO:0005615; C:extracellular space; IEA.
DR GO; GO:0005126; F:hematopoietin/interferon-class (D200-domain. . .; IEA.
DR GO; GO:0006952; P:defense response; IEA.
DR GO; GO:0009615; P:response to virus; IEA.
DR InterPro; IPR000471; Interferon abd.
DR PANTHER; PTHR11691; Interferon abd; 1.
DR Pfam; PF00143; Interferon; 1.
DR PRINTS; PR00266; INTERFERONAB.
DR PRODOM; PD000550; Interferon_abd; 1.
DR SMART; SM00076; IFabd; 1.
DR PROSITE; PS00252; INTERFERON_A_B_D; 1.
KW Antiviral defense; Cytokine.
KW Antiviral defense; Cytokine.
SQ SEQUENCE 189 AA; 21942 MW; C605992FE278043 CRC64;
Query Match 93.0%; Score 801; DB 2; Length 189;
Best Local Similarity 91.0%; Pred. No. 1.2e-60;
Matches 151; Conservative 9; Mismatches 6; Indels 0; Gaps 0;
Qy 2 CDLPQTHSLGNRRALILLAQWRISPFSCLDKRDHDFGFPQEEFGNQFQKQAQISVLHEM 61
Db 24 CDLPQTHSLGNRRALILLAQWRISPFSCLDKRDHDFGFPQEEFGNQFQKQAQISVLHEM 83
Qy 62 IQQTFNLFSTKDSAAWDESILKEFYTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 121
Db 84 IQQTFNLFSTKDSATWDTLLDKFYTYELYQQLNDLEACMVEGVETPLMNVDSILTV 143
Qy 122 KKYFORITLYLTKKYSFCANEVRAEIMRSFSLSTNQLERLKE 167
Db 144 KKYFORITLYLTKKYSFCANEVRAEIMRSFSLSANQLERLKE 189
RESULT 5
OS Q5VWD1_HUMAN PRELIMINARY; PRT; 189 AA.
ID Q5VWD1;
AC Q5VWD1;
DT 10-MAY-2005, integrated into UniProtKB/TrEMBL.
DT 10-MAY-2005, sequence version 1.
DE 21-FEB-2006, entry version 10.
DE Interferon, alpha 21.
GN Name=IFNA21; ORFNames=RP11-113D19.8-001;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]

RP NUCLEOTIDE SEQUENCE.
RA Martin S.;
RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Brain, and PCR rescued clones;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausberg R.D., Collins F.S., Wagner L., Schenken C.F., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.P., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh P.,
RA Statchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.P., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.",
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Brain;
RG NIH MGC Project;
RL Submitted (AUG-2005) to the EMBL/GenBank/DBJ databases.
RN [4]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones;
RG NIH MGC Project;
RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
CC -1- SUBCELLULAR LOCATION: Secreted protein (By similarity).
CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC
CC EMBL; AL390882; CAH70157.1; -; Genomic_DNA.
DR EMBL; BC101638; AA101639.1; -; mRNA.
DR EMBL; BC101640; AA101641.1; -; mRNA.
DR EMBL; BC096699; AAH96699.1; -; mRNA.
DR SMR; Q5VWD1; 24-189.
DR Ensembl; ENSG00000137080; Homo sapiens.
DR GO; GO:0005615; C:extracellular space; IEA.
DR GO; GO:0005126; F:hematopoietin/interferon-class (D200-domain. . .; IEA.
DR GO; GO:0006952; P:defense response; IEA.
DR GO; GO:0009615; P:response to virus; IEA.
DR InterPro; IPR000471; Interferon abd.
DR PANTHER; PTHR11691; Interferon abd; 1.
DR Pfam; PF00143; Interferon; 1.
DR PRINTS; PR00266; INTERFERONAB.
DR SMART; SM00076; IFabd; 1.
DR PROSITE; PS00252; INTERFERON_A_B_D; 1.
KW Antiviral defense; Cytokine.
KW Antiviral defense; Cytokine.
SQ SEQUENCE 189 AA; 21741 MW; F0B6C9C392905802 CRC64;
Query Match 93.0%; Score 801; DB 2; Length 189;
Best Local Similarity 94.6%; Pred. No. 1.2e-60;
Matches 157; Conservative 2; Mismatches 7; Indels 0; Gaps 0;
Qy 2 CDLPQTHSLGNRRALILLAQWRISPFSCLDKRDHDFGFPQEEFGNQFQKQAQISVLHEM 61
Db 24 CDLPQTHSLGNRRALILLAQWRISPFSCLDKRDHDFGFPQEEFGNQFQKQAQISVLHEM 83
Qy 62 IQQTFNLFSTKDSAAWDESILKEFYTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 121
Db 84 IQQTFNLFSTKDSATWDTLLDKFYTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSKPCAEVVRABIMRSPSLSTNLQERLRKE 167
 ID IFNA4_HUMAN STANDARD; PRT; 189 AA.
 AC P05014; P13358;
 DT 13-AUG-1987, integrated into UniProtKB/Swiss-Prot.
 DT 10-MAY-2005, sequence version 2.
 DT 07-FEB-2006, entry version 61.
 DE Interferon alpha-4 precursor (Interferon alpha-4B) (Interferon alpha-
 DE M1) (Interferon alpha-76).
 GN Name=IFNA4;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP NUCLEOTIDE SEQUENCE, AND VARIANTS ALPHA-4B THR-74 AND VAL-137.
 RX MEDLINE=86037205; PubMed=4057246;
 RA Henco K., Brosius J., Fujisawa A., Fujisawa J., Haynes J.R.,
 RA Hochstadt J., Kovacic T., Pasek M., Schanboeck A., Schmid J.,
 RA Todokoro K., Waelchli M., Nagata S., Weissmann C.;
 RT "Structural relationship of human interferon alpha genes and
 RT pseudogenes.";
 RL J. Mol. Biol. 185:227-260(1985).
 RN [2]
 RP NUCLEOTIDE SEQUENCE.
 RX MEDLINE=84307815; PubMed=6089830;
 RA Linnane A.W., Beilharz M.W., McMullen G.L., Macreadie I.G., Murphy M.,
 RA Niebet I.T., Novitski C.E., Woodrow G.C.;
 RT "Nucleotide sequence and expression in E. coli of a human interferon-
 RT alpha gene selected from a genomic library using synthetic
 RT oligonucleotides.";
 RL Biochem. Int. 8:725-732(1984).
 RN [3]
 RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA], AND VARIANT THR-74.
 RX MEDLINE=22388357; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh P.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Frange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalon D.K., Murny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettman M., Madan A., Casavant T.L., Scheetz T.E.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skaleka U., Smallos D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [4]
 RP PROTEIN SEQUENCE OF 24-56.
 RX MEDLINE=98087498; PubMed=9425112;
 RA Nyman T.A., Toeloe H., Parkkinen J., Kalkkinen N.;
 RT "Identification of nine interferon-alpha subtypes produced by Sendai
 RT virus-induced human peripheral blood leucocytes.";
 RL Biochem. J. 329:295-302(1998).
 RN [5]
 RP POLYMORPHISM.
 RX MEDLINE=97474410; PubMed=9335434;
 RA Hussain M., Gill D.S., Liao M.-J.;
 RT "Both variant forms of interferon-alpha4 gene (IFNA4a and IFNA4b) are

RT present in the human population.";
 RL J. Interferon Cytokine Res. 17:559-566(1997).
 CC FUNCTION: Produced by macrophages, IFN-alpha have antiviral
 CC activities. Interferon stimulates the production of two enzymes: a
 CC protein kinase and an oligoadenylate synthetase.
 CC SUBCELLULAR LOCATION: Secreted protein.
 CC POLYMORPHISM: Two forms exist; alpha-4a (shown here) and alpha-4b.
 CC SIMILARITY: Belongs to the alpha/beta interferon family.
 CC Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms
 CC Distributed under the Creative Commons Attribution-NoDerivs License
 CC EMBL: X02955; CAA26701.1; -; Genomic DNA.
 DR EMBL: M27318; AAS2726.1; -; mRNA.
 DR EMBL: BC074965; AAH74965.1; -; mRNA.
 DR EMBL: BC074966; AAH74966.1; -; mRNA.
 DR PIR: E23753; IYHU4B.
 DR PIR: I52347; I52347.
 DR HSSP: P01563; IITF.
 DR SMR: P05014; 24-189.
 DR Ensembl: ENSG00000147877; Homo sapiens.
 DR HGNC: HGNC:5425; IFNA4.
 DR MIM: 147584; Gene.
 DR GO: GO:0005132; F:interferon-alpha/beta receptor binding; TAS.
 DR GO: GO:0009615; P:response to virus; TAS.
 DR InterPro: IPR000471; Interferon abd.
 DR PANTHER: PTHR11691; Interferon_abd; 1.
 DR Pfam: PF00143; Interferon; 1.
 DR PRINTS: PR00266; INTERFERONAB.
 DR SMART: SM00076; IFABD; 1.
 DR PROSITE: PS00252; INTERFERON A B D; 1.
 DR Antiviral defense; Cytokine; Direct protein sequencing; Polymorphism.
 KW SIGNAL.
 FT SIGNAL. 1 23 Interferon alpha-4.
 FT CHAIN 24 189 /FTID=PRO_0000016361.
 FT DISULFID 24 122 By similarity.
 FT DISULFID 52 162 By similarity.
 FT VARIANT 74 74 A -> T (in alpha-4B; dbSNP:1062571).
 FT VARIANT 137 137 E -> V (in alpha-4B; dbSNP:3750480).
 FT SEQUENCE 189 AA; 21808 MW; 828DF9C3ABC337F CRC64;
 SQ
 Query Match 91.3%; Score 786; DB 1; Length 189;
 Best Local Similarity 91.6%; Pred. No. 2.3e-59;
 Matches 152; Conservative 8; Mismatches 6; Indels 0; Gaps 0;
 QY 2 CDLPOTHSLGNRRALLLAQMRISPFSCLDKRDHDFGFPQEPDGNQFQQAQISVLHEM 61
 Db 24 CDLPOTHSLGNRRALLLAQMRISPFSCLDKRDHDFGFPQEPDGNQFQQAQISVLHEM 83
 QY 62 IQQTNLSTKDSAAWDESLEKFTYLYQLNDLEACVIOEVGVETPLANNVSILAV 121
 Db 84 IQQTNLSTKDSAAWDESLEKFTYLYQLNDLEACVIOEVGVETPLANNVSILAV 143
 QY 122 KKYFORITLYLTKKYSKPCAEVVRABIMRSPSLSTNLQERLRKE 167
 Db 144 KKYFORITLYLTKKYSKPCAEVVRABIMRSPSLSTNLQERLRKE 189
 RESULT 7
 QSVV15 HUMAN PRELIMINARY; PRT; 189 AA.
 ID QSVV15_HUMAN
 AC QSVV15;
 DT 07-DEC-2004, integrated into UniProtKB/TrEMBL.
 DT 07-DEC-2004, sequence version 1.
 DT 21-FEB-2006, entry version 10.
 DE Interferon, alpha 4.
 GN Name=IFNA4; ORFNames=RP118.4-001;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;


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FT CHAIN 24 189 Interferon alpha-17.
FT DISULFID 24 122 /FTID=PRO_0000016369.
FT DISULFID 24 122 By similarity.
FT VARIANT 52 162 I -> R (in dbSNP:9298814).
FT VARIANT 184 184 /FTID=VAR_013020.
FT CONFLICT 57 57 H -> P (in Ref. 1).
FT CONFLICT 78 78 S -> P (in Ref. 3).
SQ SEQUENCE 189 AA; 21728 MW; 0448EAB9D7FC32 CRC64;

Query Match 90.2%; Score 777; DB 1; Length 189;
Best Local Similarity 90.4%; Pred. No. 1.4e-58;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPFSCLDKRDHDFGFPQEEFDGNOFQKQAISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAQMGRISPFSCLDKRDHDFGLPQEEFDGNOFQKQAISVLHEM 83
QY 62 IQQTFNLFSTKDSAAWDESLLEKFTYLYQLNDLEACVIOEVGVETPLMNVDLSILAV 121
DB 84 IQQTFNLFSTEDSSAAWQSLLEKFTSTLYQLNLEACVIOEVGVETPLMNEDSILAV 143
QY 122 KKYFQRTILYLTCKYSPCAWEVVRABIMRSFSLTNLOERLRKE 167
DB 144 KKYFQRTILYLTCKYSPCAWEVVRABIMRSFSLTNLOKILRRKD 189

RESULT 9
QSV253 HUMAN PRELIMINARY; PRT; 189 AA.
AC QSV253;
DT 10-MAY-2005, integrated into UniProtKB/TrEMBL.
DT 21-FEB-2006, entry version 8.
DE Interferon, alpha 17.
GN Name=IFNA17; ORFNames=RP11-380P16.10-001;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RA Besley H.;
RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Klausner R.D., Collins P.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Huiyik S.W.,
RA Vallalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahay J., Helton E., Kettner M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A.C., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Kryzhanovskiy M.I., Skalska U., Smalusz D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones;
RG NIH MGC Project;

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RL Submitted (JUN-2005) to the EMBL/GenBank/DBJ databases.
RN [4]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones;
RG NIH MGC Project;
RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
CC -1- SUBCELLULAR LOCATION: Secreted protein (By similarity).
CC Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC -----
CC EMBL; AL162420; CAH73185.1; -; Genomic_DNA.
DR EMBL; BC098355; AAH98355.1; -; mRNA.
DR EMBL; BC096732; AAH96732.1; -; mRNA.
DR SMR; Q5VZ53; 24-189.
DR Ensembl; ENSG00000186809; Homo sapiens.
DR GO; GO:0005615; C:extracellular space; IEA.
DR GO; GO:0005126; P:hematopoietin/interferon-class (D200-domain. . .; IEA.
DR GO; GO:0006952; P:defense response; IEA.
DR GO; GO:0009615; P:response to virus; IEA.
DR InterPro; IPR000471; Interferon_abd.
DR PANTHER; PTHR11691; Interferon_abd; 1.
DR Pfam; PF00143; Interferon; 1.
DR PRINTS; PR00266; INTERFERONAB.
DR SMART; SM00076; IFabd; 1.
DR PROSITE; PS00252; INTERFERON_A_B_D; 1.
KW Antiviral defense; Cytokine.
KW SEQUENCE 189 AA; 21728 MW; 0448EAB9D7FC32 CRC64;

Query Match 90.2%; Score 777; DB 2; Length 189;
Best Local Similarity 90.4%; Pred. No. 1.4e-58;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPFSCLDKRDHDFGFPQEEFDGNOFQKQAISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAQMGRISPFSCLDKRDHDFGLPQEEFDGNOFQKQAISVLHEM 83
QY 62 IQQTFNLFSTKDSAAWDESLLEKFTYLYQLNDLEACVIOEVGVETPLMNVDLSILAV 121
DB 84 IQQTFNLFSTEDSSAAWQSLLEKFTSTLYQLNLEACVIOEVGVETPLMNEDSILAV 143
QY 122 KKYFQRTILYLTCKYSPCAWEVVRABIMRSFSLTNLOERLRKE 167
DB 144 KKYFQRTILYLTCKYSPCAWEVVRABIMRSFSLTNLOKILRRKD 189

RESULT 10
IFN10 HUMAN STANDARD; PRT; 189 AA.
AC P01566;
DT 21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
DT 21-JUL-1986, sequence version 1.
DT 07-FEB-2006, entry version 61.
DE Interferon alpha-10 precursor (Interferon alpha-C) (LeIF C)
GN Name=IFNA10;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE [MRNA].
RX MEDLINE=81148795; PubMed=6163083;
RA Goeddel D.V., Leung D.W., Dull T.J., Gross M., Lawn R.M.,
RA McCandlish R., Seeberg P.H., Ullrich A., Yelverton E., Gray P.W.;
RT "The structure of eight distinct cloned human leukocyte interferon
RT cDNAs.";
RL Nature 290:20-26 (1981).
RN [2]
RP NUCLEOTIDE SEQUENCE [MRNA].
RX MEDLINE=89328015; PubMed=2526839;
RA Bartholomew C., Windass J.D.;

```


"Identification of a functional allele of a human interferon-alpha gene previously characterized as a pseudogene.";
J. Interferon Res. 9:407-417(1989).

[3]
RN NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
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RA Villalon D.K., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Muzny K.C., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Touchman J.W., Green E.D., Dickson M.C.,
RA Blakesley R.W., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalek U., Smalilus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,
RA "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
[4]
RN PROTEIN SEQUENCE OF 24-53.
RX MEDLINE=98087498; PubMed=9425112;
RA Nyman T.A., Toeloe H., Parkkinen J., Kalkkinen N.;
RA "Identification of nine interferon-alpha subtypes produced by Sendai
RT virus-induced human peripheral blood leucocytes.";
RL Biochem. J. 329:302(1998).
CC -!- FUNCTION: Produced by macrophages, IFN-alpha have antiviral
CC activities. Interferon stimulates the production of two enzymes: a
CC protein kinase and an oligoadenylate synthetase.
CC -!- SUBCELLULAR LOCATION: Secreted protein.
CC -!- SIMILARITY: Belongs to the alpha/beta interferon family.
CC
CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC
CC EMBL; V00551; CAA23812.1; -; mRNA.
DR EMBL; BC069409; AAH69409.1; -; mRNA.
DR PIR; A60937; IYHUA5.
DR HSSP; P01563; 1ITF.
DR SMR; P01566; 24-189.
DR Ensembl; ENSG00000186803; Homo sapiens.
DR HGNC; HGNC:5418; IFNA10.
DR MIM; 147577; gene.
DR LinkHub; P01566; -.
DR GO; GO:0005576; C:extracellular region; NAS.
DR GO; GO:0005132; P:interferon-alpha/beta receptor binding; ISS.
DR GO; GO:0009615; P:response to virus; ISS.
DR InterPro; IPR000471; Interferon_abd.
DR PANTHER; PTHR11691; Interferon_abd; 1.
DR Pfam; PF00143; Interferon; 1.
DR PRINTS; PR00266; INTERFERONAB.
DR ProDom; PD000550; Interferon_abd; 1.
DR SMART; SM00076; IFab; 1.
DR PROSITE; PS00252; INTERFERON_A_B_D; 1.
* KW Antiviral defense; Cytokine; Direct protein sequencing; Signal.
FT SIGNAL 1 23
FT CHAIN 24 189 Interferon alpha-10.
FT FTID=PRO_000016366.
FT DISULFID 24 122 By similarity.
FT DISULFID 52 162 By similarity.
SQ SEQUENCE 189 AA; 21835 MW; CEC680996FDA706B CRC64;

Query Match 90.1%; Score 776; DB 1; Length 189;

Best Local Similarity 90.4%; Pred. No. 1.7e-58; Indels 0; Gaps 0;
Matches 150; Conservative 7; Mismatches 9;

QY 2 CDLPQTHSLGNRRALILIAQMRIRSPFSCDKRHDGFGPQEFQKQAKAIVSLVHEM 61
DB |||||
24 CDLPQTHSLGNRRALILIAQMRIRSPFSCDKRHDGFGPQEFQKQAKAIVSLVHEM 83
|||
QY 62 IOOTFNLPSTKSSANWDESILKEFYTYLYOQNDLEACVIOEVGVEETPLMNVDSILAV 121
DB |||||
84 IOOTFNLPSTKSSANWDESILKEFYTYLYOQNDLEACVIOEVGVEETPLMNVDSILAV 143
|||
QY 122 KKYFORITLYITEKKYSKCAWEVRAEIMRSFSLSTNLQERLRKE 167
DB |||||
144 KKYFORITLYITEKKYSKCAWEVRAEIMRSFSLSTNLQERLRKE 189
|||

RESULT 11

QSVW13 HUMAN PRELIMINARY; PRT; 189 AA.
ID QSVW13_HUMAN
AC QSVW13_HUMAN
DT 10-MAY-2005, integrated into UniProtKB/TrEMBL.
DT 10-MAY-2005, sequence version 1.
DT 21-FEB-2006, entry version 9.
DE Interferon, alpha 10.
GN Name=IFNA10; ORFNames=RP11-1P8.9-001;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Pelan S.;
RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
[2]
RN NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
RA Bosak S.A., McSwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Villalon D.K., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Muzny K.C., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Touchman J.W., Green E.D., Dickson M.C.,
RA Blakesley R.W., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalek U., Smalilus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,
RA "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
[3]

NUCLEOTIDE SEQUENCE.

RC TISSUE=PCR rescued clones;
RG NIH MGC Project;
RL Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
CC -!- SUBCELLULAR LOCATION: Secreted protein (by similarity).
CC
CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC
CC EMBL; AL512606; CAH71191.1; -; Genomic_DNA.
DR EMBL; BC103972; AAI03973.1; -; mRNA.
DR EMBL; BC103973; AAI03974.1; -; mRNA.
DR SMR; QSVW13; 24-189.
DR Ensembl; ENSG00000186803; Homo sapiens.
DR GO; GO:0005615; C:extracellular space; IEA.
DR GO; GO:0005126; F:hematopoietin/interferon-class (D200-domain. . .; IEA.
DR GO; GO:0006952; P:defense response; IEA.

DR GO; GO:0009615; P:response to virus; IEA.
DR InterPro; IPR000471; Interferon abd.
DR Pfam; PF00143; Interferon; 1.
DR PRINTS; PR00266; INTERFERONAB.
DR SMART; SM00076; IFabd; 1.
DR PROSITE; PS00252; INTERFERON_A_B_D; 1.
KW Antiviral defense; Cytokine.
SQ SEQUENCE 189 AA; 21835 MW; CEC680996FDA706B CRC64;

Query Match 90.1%; Score 776; DB 2; Length 189;
Best Local Similarity 90.4%; Pred. No. 1.7e-58;
Matches 150; Conservative 7; Mismatches 9; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLIAQMRRISPFSCDKRDHDFGFPQEEFDGNGQFQKQAISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLIAQMRRISPFSCDKRDHDFRIPQEEFDGNGQFQKQAISVLHEM 83

QY 62 IQOTNLNLSFKDSSAAWDSLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 84 IQOTNLNLSFKDSSAAWDSLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILAV 143

QY 122 KKYFORITLYLTKKYSPCAWVRAEIMRSPSLNQLQRLRRKE 167
DB 144 KKYFORITLYLTKKYSPCAWVRAEIMRSPSLNQLQRLRRKD 189

RESULT 12
IFN14 HUMAN
ID IFN14_HUMAN STANDARD; PRT; 189 AA.
AC P01570;
DT 21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
DT 21-JUL-1986, sequence version 3.
DT 07-FEB-2006, entry version 63.
DE Interferon alpha-14 precursor (Interferon alpha-H) (LeIF H)
DE (Interferon lambda-2-H).
GN Name=IFNA14;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=86037205; PubMed=4057246;
RA Henco K., Brosius J., Fujisawa A., Fujisawa J., Haynes J.R.,
RA Hochstadt J., Kovacic T., Fassek M., Schaenboeck A., Schmid J.,
RA Todokoro K., Waelchli M., Nagata S., Weissmann C.;
RT "Structural relationship of human interferon alpha genes and
RT pseudogenes";
RL J. Mol. Biol. 185:227-260(1985).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=81201124; PubMed=6165082;
RA Lawn R.M., Adelman J., Dull T.J., Gross M., Goeddel D.V., Ullrich A.;
RT "DNA sequence of two closely linked human leukocyte interferon
RT genes";
RL Science 212:1159-1162(1981).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=81148795; PubMed=6163083;
RA Goeddel D.V., Leung D.W., Dull T.J., Gross M., Lawn R.M.,
RA McCandless R., Seeburg P.H., Ullrich A., Yelverton E., Gray P.W.;
RT "The structure of eight distinct cloned human leukocyte interferon
RT cDNAs";
RL Nature 290:20-26(1981).
RN [4]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RX MEDLINE=23288257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schetz T.E.,
RA Brownstein M.J., Ustin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Butcherfield V.S.N., Krzywinski M.I., Skalska U., Myers R.M.,
RA Schmerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [5]
RP PROTEIN SEQUENCE OF 24-53, AND CARBOHYDRATE-LINKAGE SITE ASN-95.
RX MEDLINE=98087498; PubMed=9425112;
RA Nyman T.A., Toeloe H., Parkkinen J., Kalkkinen N.;
RT "Identification of nine interferon-alpha subtypes produced by Sendai
RT virus-induced human peripheral blood leucocytes";
RL Biochem. J. 329:295-302(1998).
RN [6]
RP ABSENCE OF POLYMORPHISM.
RX MEDLINE=97067358; PubMed=8910771;
RA Huseain M., Gill D.S., Liao M.-J.;
RT "Identification of interferon-alpha 7, -alpha 14, and -alpha 21
RT variants in the genome of a large human population.";
RL J. Interferon Cytokine Res. 16:853-859(1996).
CC -!- FUNCTION: Produced by macrophages, IFN-alpha have antiviral
CC activities. Interferon stimulates the production of two enzymes: a
CC protein kinase and an oligoadenylate synthetase.
CC -!- SUBCELLULAR LOCATION: Secreted protein.
CC -!- SIMILARITY: Belongs to the alpha/beta interferon family.
CC -----
CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
CC Distributed under the Creative Commons Attribution-NonCommercial License
CC -----
CC EMBL; V00533; CAA23794.1; -; Genomic DNA.
CC EMBL; X02959; CAA26705.1; -; Genomic DNA.
CC EMBL; V00542; CAA23803.1; -; mRNA.
CC EMBL; BC074956; AAH74956.1; -; mRNA.
CC PIR; A32916; IVHUI4.
CC HSSP; P01563; 1ITF.
CC SMR; P01570; 24-189.
CC GlycoSuiteDB; P01570; -.
CC HGNC; HGNC:5420; IFNA14.
CC MIM; 147579; gene.
CC GO; GO:0005126; F:hematopoietin/interferon-class (D200-domain. . .; TAS.
CC InterPro; IPR000471; Interferon abd.
CC PANTHER; PTHR11691; Interferon abd; 1.
CC Pfam; PF00143; Interferon; 1.
CC PRINTS; PR00266; INTERFERONAB.
CC ProDom; PD000550; Interferon_abd; 1.
CC SMART; SM00076; IFabd; 1.
CC PROSITE; PS00252; INTERFERON_A_B_D; 1.
KW Antiviral defense; Cytokine; Direct protein sequencing; Glycoprotein;
KW Signal.
FT SIGNAL 1 23
FT CHAIN 24 189 Interferon alpha-14.
FT /FTID=PRO_0000016367.
FT N-linked (GlcNAc. . .).
FT DISULFID 95 95 By similarity.
FT DISULFID 24 122 By similarity.
FT DISULFID 52 162 By similarity.
FT CONFLICT 175 175 L -> F (in Ref. 3).
SQ SEQUENCE 189 AA; 22063 MW; B6B71E2F0D644FE7 CRC64;

Query Match 89.2%; Score 768; DB 1; Length 189;
Best Local Similarity 88.6%; Pred. No. 8.1e-58;
Matches 147; Conservative 10; Mismatches 9; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLIAQMRRISPFSCDKRDHDFGFPQEEFDGNGQFQKQAISVLHEM 61

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Db      24  CNLSQTHSLNNRRTLLMAQMRISPFSCDKDRHDFEFPQEEFDGNGQFOKAQAISVLHEM 83
Qy      62  IQOTFNLFSTKSSAAWDESLLKFKYTELYQQLNDLEACVIOBVGVEETPLMNVDSILAV 121
Db      84  MOOTFNLFSTKSSAAWDETLLKFKYTELYQQLNDLEACVIOBVGVEETPLMNVDSILAV 143
Qy      122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSLFSLNQLRKRKE 167
Db      144 KKYFORITLYLMEKKYSPCAWEVVRVRAEIMRSLFSLNQLRKRKD 189

RESULT 13
Q5VZ56 HUMAN PRELIMINARY; PRT; 189 AA.
AC Q5VZ56
DT 10-MAY-2005, integrated into UniProtKB/TrEMBL.
DT 10-MAY-2005, sequence version 1.
DE Interferon, alpha 14 (IFNA14 protein).
GN Name=IFNA14; ORFNames=RP11-380P16.9-001;
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Beasley H.;
RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones; DOI=10.1073/pnas.242603899;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaby S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketterman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16999-16903 (2002).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones;
RG NIH NCG Project;
RL Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
CC -1- SUBCELLULAR LOCATION: Secreted protein (By similarity).
CC
CC Copyrighted by the Uniprot Consortium, see http://www.uniprot.org/terms
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC -----
DR EMBL; AL162420; CAH73187.1; -; Genomic_DNA.
DR EMBL; BC104159; AA104160.1; -; mRNA.
DR EMBL; BC104160; AA104161.1; -; mRNA.
DR SMR; Q5VZ56; 24-189.
DR Eusemb1; ENSG00000137026; Homo sapiens.
DR GO; GO:0005615; C:extracellular space; IEA.
DR GO; GO:0005126; F:hematopoietin/interferon-class (D200-domain. . .; IEA.
DR GO; GO:0006952; P:defense response; IEA.
DR GO; GO:0006915; P:response to virus; IEA.
```

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DR InterPro; IPR000471; Interferon_abd.
DR PANTHER; PTHR11691; Interferon_abd; 1.
DR Pfam; PF00143; Interferon; 1.
DR PRINTS; PRO0266; INTERFERONAB.
DR SMART; SM00076; IFabd; 1.
DR PROSITE; PS00252; INTERFERON_A_B_D; 1.
KW Antiviral defense; Cytokine.
SQ SEQUENCE 189 AA; 22063 MW; B6B71E2F0D644FE7 CRC64;

Query Match      89.2%; Score 768; DB 2; Length 189;
Best Local Similarity 88.6%; Pred. No. 8.1e-58;
Matches 147; Conservative 10; Mismatches 9; Indels 0; Gaps 0;

Qy      2  CDLPQTHSLGNRRALILLAQMRISPFSCDKDRHDFEFPQEEFDGNGQFOKAQAISVLHEM 61
Db      24  CNLSQTHSLNNRRTLLMAQMRISPFSCDKDRHDFEFPQEEFDGNGQFOKAQAISVLHEM 83
Qy      62  IQOTFNLFSTKSSAAWDESLLKFKYTELYQQLNDLEACVIOBVGVEETPLMNVDSILAV 121
Db      84  MOOTFNLFSTKSSAAWDETLLKFKYTELYQQLNDLEACVIOBVGVEETPLMNVDSILAV 143
Qy      122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSLFSLNQLRKRKE 167
Db      144 KKYFORITLYLMEKKYSPCAWEVVRVRAEIMRSLFSLNQLRKRKD 189

RESULT 14
IFNA7 HUMAN STANDARD; PRT; 189 AA.
AC P01567; Q14607;
DT 21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
DT 21-JUL-1986, sequence version 1.
DE Interferon alpha-7 precursor (Interferon alpha-J1) (IFN-alpha-J1)
DE (Interferon alpha-J) (Leif J.).
GN Name=IFNA7;
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=86037205; PubMed=4057246;
RA Henco K., Brosius J., Fujisawa A., Fujisawa J., Haynes J.R.,
RA Hochstadt J., Kovacic T., Pasek M., Schamboeck A., Schmid J.,
RA Todokoro K., Waelchli M., Nagata S., Weissmann C.;
RT "Structural relationship of human interferon alpha genes and
RT pseudogenes";
RL J. Mol. Biol. 185:227-260 (1985).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=83010248; PubMed=6181262;
RA Ullrich A., Gray A., Goeddel D.V., Dull T.J.;
RT "Nucleotide sequence of a portion of human chromosome 9 containing a
RT leukocyte interferon gene cluster.";
RL J. Mol. Biol. 156:467-486 (1982).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=86005847; PubMed=2995168;
RA Cohen S., Velan B., Grosfeld H., Shalita Z., Leitner M.,
RA Shafferman A.;
RT "Cloning, expression and biological activity of a new variant of human
RT interferon alpha identified in virus induced lymphoblastoid cells.";
RL Dev. Biol. Stand. 60:111-122 (1985).
RN [4]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC TISSUE=Brain;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaby S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
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RA Fahey J., Helton E., Ketterman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16999-16903 (2002).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=PCR rescued clones;
RG NIH NCG Project;
RL Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
CC -1- SUBCELLULAR LOCATION: Secreted protein (By similarity).
CC
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CC -----
DR EMBL; AL162420; CAH73187.1; -; Genomic_DNA.
DR EMBL; BC104159; AA104160.1; -; mRNA.
DR EMBL; BC104160; AA104161.1; -; mRNA.
DR SMR; Q5VZ56; 24-189.
DR Eusemb1; ENSG00000137026; Homo sapiens.
DR GO; GO:0005615; C:extracellular space; IEA.
DR GO; GO:0005126; F:hematopoietin/interferon-class (D200-domain. . .; IEA.
DR GO; GO:0006952; P:defense response; IEA.
DR GO; GO:0006915; P:response to virus; IEA.
```

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldi M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toehiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahay J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalek A.U., Smalilus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RA "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [5]
RP PROTEIN SEQUENCE OF 24-57.
RX MEDLINE=98087498; PubMed=9425112;
RA Nyman T.A., Toeloe H., Parkkinen J., Kalkkinen N.;
RT "Identification of nine interferon-alpha subtypes produced by Sendai
RT virus-induced human peripheral blood leucocytes.";
RL Biochem. J. 329:295-302(1998).
RN [6]
RP ABSENCE OF POLYMORPHISM.
RX HUSSAIN-97067358; PubMed=8910771;
RA Hussain M., Gill D.S., Liao M.-J.;
RT "Identification of interferon-alpha 7, -alpha 14, and -alpha 21
RT variant in the genome of a large human population.";
RL J. Interferon Cytokine Res. 16:853-859(1996).
CC -!- FUNCTION: Produced by macrophages, IFN-alpha have antiviral
CC activities. Interferon stimulates the production of two enzymes: a
CC protein kinase and an oligadenylate synthetase.
CC -!- SUBCELLULAR LOCATION: Secreted protein.
CC -!- SIMILARITY: Belongs to the alpha/beta interferon family.
CC
CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC
CC EMBL; V00531; CAA23792.1; -; Genomic DNA.
CC EMBL; X02960; CAA26706.1; -; Genomic DNA.
CC EMBL; M34913; AAA36039.1; -; mRNA.
CC EMBL; BC074991; AAH74991.1; -; mRNA.
CC EMBL; BC074992; AAH74992.1; -; mRNA.
CC PIR; A01831; IVHUA0.
CC PIR; I53102; I53102.
CC HSSP; P01563; IITP.
CC SMR; P01567; 24-189.
CC Ensemble; ENSG00000147877; Homo sapiens.
CC HGNC; HGNC:5428; IFNA7.
CC MIM; 147567; gene.
CC GO; GO:0005576; C:extracellular region; TAS.
CC GO; GO:0005132; F:interferon-alpha/beta receptor binding; TAS.
CC GO; GO:0007267; P:cell-cell signaling; TAS.
CC GO; GO:0009615; P:response to virus; TAS.
CC InterPro; IPR000471; Interferon_abd.
CC PANTHER; PTHR11691; Interferon_abd; 1.
CC Pfam; PF00143; Interferon; 1.
CC PRINTS; PR00266; INTERFERONAB.
CC ProDom; PD000550; Interferon_abd; 1.
CC SMART; SM00076; IFabd; 1.
CC PROSITE; PS00252; INTERFERON_A_B_D; 1.
CC Antiviral defense; Cytokine; Direct protein sequencing; Signal.
FT SIGNAL 1 23
FT CHAIN 24 189 Interferon alpha-7.
FT /FTID=PRO_0000016364.
FT DISULFID 24 122 By similarity.
FT FT 52 162 By similarity.
FT CONFLICT 10 10 V -> A (in Ref. 3).
FT CONFLICT 155 155 M -> T (in Ref. 3).
SQ SEQUENCE 189 AA; 22107 MW; 9DF6F5C81E339A42 CRC64;
Query Match 87.6%; Score 754; DB 1; Length 189;

Best Local Similarity 88.0%; Pred. No. 1.3e-56;
Matches 146; Conservative 10; Mismatches 10; Indels 0; Gaps 0;
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DB 24 CDLPQTHSLGNRRALILLAQMRISPPSCLDKRDHDFGFPQEEFDGNQFOKQAQISVLHEM 83
QY 62 IQQTNLFSTKDSAAWDESLLEKFTYLYQQNLDEACVIOEVGVETPLANNVDSILAV 121
DB 84 IQQTNLFSTKDSAAWDESLLEKFTYLYQQNLDEACVIOEVGVETPLANNVDSILAV 143
QY 122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSPSLSTNTQERLRKE 167
DB 144 KKYFORITLYLTKKYSPCAWEVVRAEIMRSPSLSTNTQERLRKE 189
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AC QSVV14;
DT 10-MAY-2005, integrated into UniProtKB/TrEMBL.
DT 10-MAY-2005, sequence version 1.
DT 21-FEB-2006, entry version 6.
DE Interferon, alpha 7.
GN Name=IFNA7; ORFNames=RP11-IP8.8-001;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Pelan S.;
RL Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
CC -!- SUBCELLULAR LOCATION: Secreted protein (By similarity).
CC
CC Copyrighted by the UniProt Consortium, see <http://www.uniprot.org/terms>
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC
CC EMBL; AL512606; CAH71190.1; -; Genomic DNA.
CC Ensemble; ENSG00000147877; Homo sapiens.
CC GO; GO:0005615; C:extracellular space; IEA.
CC GO; GO:0005126; F:hematopoietin/interferon-class (D200-domain...); IEA.
CC GO; GO:0006952; P:defense response; IEA.
CC GO; GO:0009615; P:response to virus; IEA.
CC InterPro; IPR000471; Interferon_abd.
CC PANTHER; PTHR11691; Interferon_abd; 1.
CC Pfam; PF00143; Interferon; 1.
CC PRINTS; PR00266; INTERFERONAB.
CC SMART; SM00076; IFabd; 1.
CC PROSITE; PS00252; INTERFERON_A_B_D; 1.
CC Antiviral defense; Cytokine.
KW SEQUENCE 189 AA; 22107 MW; 9DF6F5C81E339A42 CRC64;
Query Match 87.6%; Score 754; DB 2; Length 189;
Best Local Similarity 88.0%; Pred. No. 1.3e-56;
Matches 146; Conservative 10; Mismatches 10; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMRISPPSCLDKRDHDFGFPQEEFDGNQFOKQAQISVLHEM 61
DB 24 CDLPQTHSLGNRRALILLAQMRISPPSCLDKRDHDFGFPQEEFDGNQFOKQAQISVLHEM 83
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DB 84 IQQTNLFSTKDSAAWDESLLEKFTYLYQQNLDEACVIOEVGVETPLANNVDSILAV 143
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DB 144 KKYFORITLYLTKKYSPCAWEVVRAEIMRSPSLSTNTQERLRKE 189
Search completed: September 1, 2006, 13:27:13
Job time : 299 secs

GenCore version 5.1.9
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OM protein - protein search, using sw model

Run on: September 1, 2006, 13:27:29 ; Search time 49 Seconds
(without alignments)
298.319 Million cell updates/sec

Title: US-10-650-365A-2

Perfect score: 861

Sequence: 1 MDLFTQSLGNRRALLIA.....EIMRFSLSLNQLRRKE 167

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 650591 seqs, 87530628 residues

Total number of hits satisfying chosen parameters: 650591

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents_AA:*

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3: /EMC_Celerra_SIDS3/ptodata/2/iaa/7 COMB.pcp:*

4: /EMC_Celerra_SIDS3/ptodata/2/iaa/H COMB.pcp:*

5: /EMC_Celerra_SIDS3/ptodata/2/iaa/PCTUS COMB.pcp:*

6: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE COMB.pcp:*

7: /EMC_Celerra_SIDS3/ptodata/2/iaa/backfiles1.pcp:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	839	97.4	166	1	US-08-362-453-8
2	824	95.7	166	2	US-09-744-754C-34
3	808	93.8	189	1	US-08-026-758-1
4	807	93.7	166	2	US-09-339-913B-75
5	807	93.7	166	2	US-09-339-904A-75
6	807	93.7	166	2	US-08-769-062B-75
7	807	93.7	166	2	US-09-344-002B-75
8	807	93.7	166	2	US-09-559-565C-75
9	807	93.7	166	2	US-09-693-350-75
10	807	93.7	166	2	US-09-693-389-75
11	807	93.7	166	2	US-09-559-671A-75
12	807	93.7	166	2	US-09-339-926A-75
13	807	93.7	166	2	US-09-954-692-75
14	804	93.4	167	2	US-06-256-204C-49
15	801	93.0	189	2	US-09-206-935-11
16	801	93.0	189	2	US-09-949-016-8554
17	801	93.0	189	2	US-09-949-016-9662
18	801	93.0	189	2	US-09-949-016-9663
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21	799	92.8	167	2	US-07-145-002B-49
22	799	92.8	189	2	US-09-206-935-19
23	799	92.8	189	2	US-09-206-936-19
24	799	92.8	189	2	US-07-145-002B-12
25	799	92.8	189	2	US-07-145-002B-22
26	799	92.8	189	2	US-06-256-204C-12

27	799	92.8	189	2	US-06-256-204C-22	Sequence 22, Appl
28	799	92.8	189	2	US-09-919-497-73	Sequence 73, Appl
29	797	92.6	166	2	US-09-744-754C-9	Sequence 9, Appl
30	794	92.2	189	1	US-08-026-758-7	Sequence 7, Appl
31	793	92.1	166	2	US-09-339-913B-84	Sequence 84, Appl
32	793	92.1	166	2	US-09-339-904A-84	Sequence 84, Appl
33	793	92.1	166	2	US-08-769-062B-84	Sequence 84, Appl
34	793	92.1	166	2	US-09-344-002B-84	Sequence 84, Appl
35	793	92.1	166	2	US-09-559-565C-84	Sequence 84, Appl
36	793	92.1	166	2	US-09-693-350-84	Sequence 84, Appl
37	793	92.1	166	2	US-09-693-389-84	Sequence 84, Appl
38	793	92.1	166	2	US-09-559-671A-84	Sequence 84, Appl
39	793	92.1	166	2	US-09-339-926A-84	Sequence 84, Appl
40	793	92.1	166	2	US-09-954-692-84	Sequence 84, Appl
41	792	92.0	189	2	US-09-206-936-11	Sequence 11, Appl
42	791	91.9	166	2	US-09-744-754C-36	Sequence 36, Appl
43	791	91.9	166	2	US-09-744-754C-38	Sequence 38, Appl
44	789	91.6	166	2	US-09-744-754C-32	Sequence 32, Appl
45	788	91.5	166	2	US-09-339-913B-79	Sequence 79, Appl

ALIGNMENTS

RESULT 1
US-08-362-453-8
; Sequence 8, Application US/08362453
; Patent No. 5684129
; GENERAL INFORMATION:
; APPLICANT: FISH, Eleanor N.
; TITLE OF INVENTION: INTERFERON RECEPTOR BINDING PEPTIDES
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSES: Nikaido, Marmelstein, Murray & Oram
; STREET: 655 Fifteenth Street N.W. Suite 330
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20005-5701

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/362,453
; FILING DATE: 06-JAN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/909,739
; FILING DATE: 07-JUL-1992
; APPLICATION NUMBER: US 07/980,525
; FILING DATE: 20-NOV-1992
; APPLICATION NUMBER: PCT/CA93/00279
; APPLICATION NUMBER: FILING DATE: 06-JUL-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitts, Monica Chin
; REGISTRATION NUMBER: 36,105
; REFERENCE/DOCKET NUMBER: P638-4017
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 638-5000
; TELEFAX: (202) 638-4810
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 166 amino acids
; TYPE: amino acid
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
US-08-362-453-8

Query Match 97.4%; Score: 839; DB 1; Length 166;
Best Local Similarity 97.6%; Pred. No. 3.1e-88;
Matches 162; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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RESULT 2
US-09-744-754C-34
; Sequence 34, Application US/09744754C
; Patent No. 6685933
; GENERAL INFORMATION:
; APPLICANT: Zoon, et al.
; TITLE OF INVENTION: Interferon Alpha Hybrids
; FILE REFERENCE: 4239-56957
; CURRENT APPLICATION NUMBER: US/09/744,754C
; CURRENT FILING DATE: 2001-01-24
; PRIOR APPLICATION NUMBER: US 60/094,407
; PRIOR FILING DATE: 1998-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/15284
; PRIOR FILING DATE: 1999-07-06
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 34
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Gene Fusion
US-09-744-754C-34

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	Best Local Similarity	96.4%;	Pred. No. 1.6e-86;		
	Matches 160;	Conservative 2;	Mismatches 4;	Indels 0;	Gaps 0;
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RESULT 3
US-08-026-758-1
; Sequence 1, Application_US/08026758
; Patent No. 5780021
; GENERAL INFORMATION:
; APPLICANT: SOBEL, DOUGLAS O.
; TITLE OF INVENTION: A METHOD FOR TREATING AUTOIMMUNE
; DISEASES USING ALPHA-INTERFERON AND/OR BETA-INTERFERON
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; STREET: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/026,758
FILING DATE: 19930305
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, NO. 5780021man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 1126-096-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 189 amino acids
TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 24..189
OTHER INFORMATION: /note= "IFN-alpha consensus"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 55
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NAME/KEY: Modified-site
LOCATION: 124
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OTHER INFORMATION: 124 appears to be a typographical error in Table 1 of the
OTHER INFORMATION: specification."
US-08-026-758-1

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	Gaps 0				
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Qy	62	IQQTFFNLFS TKDSSAAWDESILLEKFFYTEL YQQLNDLEACVIOEVGVETPLMNVDISILAV	121		
Db	84	IQQTFFNLFS TKDSSAAWDESILLEKFFSTEL YQQLNDLEACVYQEVGVETPLMNEDSILAV	143		
Qy	122	KCYFQRITLYLTBKYSYPCAWVVRRAIMRSPSLSTNLQELRRKE	167		
Db	144	KCYFQRITLYLTBKYSYPCAWVVRRAIMRSPSLSTNLQELRRKD	189		

RESULT 4
US-09-339-913B-75
; Sequence 75, Application US/09339913B
; Patent No. 6303344
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, William P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020503US
; CURRENT APPLICATION NUMBER: US/09/339,913B
; CURRENT FILING DATE: 1999-06-24
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-18
; PRIOR APPLICATION NUMBER: 08/198,431
; PRIOR FILING DATE: 1994-02-17
; PRIOR APPLICATION NUMBER: 08/425,684

; PRIOR FILING DATE: 1995-04-18
; PRIOR APPLICATION NUMBER: 08/537,874
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-09-339-913B-75

Query Match 93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;
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DB 61 IOOTFNLFSTKSSAAWDSLEKFTYELYQQNLNDEACVIOEVGVETPLMNVDLSILAV 120
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DB 121 RKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLTNLQERLRKE 166

RESULT 5
US-09-339-904A-75
; Sequence 75, Application US/09339904A
; Patent No. 6319713
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020504US
; CURRENT APPLICATION NUMBER: US/09/339,904A
; CURRENT FILING DATE: 1999-06-24
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-18
; PRIOR APPLICATION NUMBER: 08/198,431
; PRIOR FILING DATE: 1994-02-17
; PRIOR APPLICATION NUMBER: 08/425,684
; PRIOR FILING DATE: 1995-04-18
; PRIOR APPLICATION NUMBER: 08/537,874
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-09-339-904A-75

Query Match 93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;
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DB 61 IOOTFNLFSTKSSAAWDSLEKFTYELYQQNLNDEACVIOEVGVETPLMNVDLSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLTNLQERLRKE 166

RESULT 6

US-08-769-062B-75
; Sequence 75, Application US/08769062B
; Patent No. 6335160
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020500US
; CURRENT APPLICATION NUMBER: US/08/769,062B
; CURRENT FILING DATE: 1996-12-18
; PRIOR APPLICATION NUMBER: 08/198,431
; PRIOR FILING DATE: 1994-02-17
; PRIOR APPLICATION NUMBER: 08/425,684
; PRIOR FILING DATE: 1995-04-18
; PRIOR APPLICATION NUMBER: 08/537,874
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-08-769-062B-75

Query Match 93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
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RESULT 7
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; Sequence 75, Application US/09344002B
; Patent No. 6355484
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020502US
; CURRENT APPLICATION NUMBER: US/09/344,002B
; CURRENT FILING DATE: 1999-06-24
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-18
; PRIOR APPLICATION NUMBER: 08/198,431
; PRIOR FILING DATE: 1994-02-17
; PRIOR APPLICATION NUMBER: 08/425,684
; PRIOR FILING DATE: 1995-04-18
; PRIOR APPLICATION NUMBER: 08/537,874
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-09-344-002B-75

Query Match 93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALLLAQMRRISPFSCDKDRHDFGFPQEEFDGNQFOKQAQAIISVLHEM 61

Db 1 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEFQGNQFOKQAISVLHEM 60
QY 62 IOQTFNLFTKDSAAWDESILLEKFTYELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 121
Db 61 IOQTFNLFTKDSAAWESQSLLEKFTSTELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 120
QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLTNLQERLRKE 167
Db 121 RKYFORITLYLTKKYSKPCAWEVVRAEIMRSLFSFSTNLQKRLRRKD 166

RESULT 8
US-09-559-565C-75
; Sequence 75, Application US/09559565C
; Patent No. 6455253
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020506US
; CURRENT APPLICATION NUMBER: US/09/559,565C
; CURRENT FILING DATE: 2000-04-27
; PRIOR APPLICATION NUMBER: 08/769,062
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-09-559-565C-75

Query Match 93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEFQGNQFOKQAISVLHEM 61
Db 1 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEFQGNQFOKQAISVLHEM 60
QY 62 IOQTFNLFTKDSAAWDESILLEKFTYELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 121
Db 61 IOQTFNLFTKDSAAWESQSLLEKFTSTELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 120
QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLTNLQERLRKE 167
Db 121 RKYFORITLYLTKKYSKPCAWEVVRAEIMRSLFSFSTNLQKRLRRKD 166

RESULT 9
US-09-693-350-75
; Sequence 75, Application US/09693350
; Patent No. 6579678
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020508US
; CURRENT APPLICATION NUMBER: US/09/693,350
; CURRENT FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-18
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-09-693-350-75

Query Match 93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEFQGNQFOKQAISVLHEM 61
Db 1 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEFQGNQFOKQAISVLHEM 60
QY 62 IOQTFNLFTKDSAAWDESILLEKFTYELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 121
Db 61 IOQTFNLFTKDSAAWESQSLLEKFTSTELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 120
QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLTNLQERLRKE 167
Db 121 RKYFORITLYLTKKYSKPCAWEVVRAEIMRSLFSFSTNLQKRLRRKD 166

RESULT 10
US-09-693-389-75
; Sequence 75, Application US/09693389
; Patent No. 6586182
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020509US
; CURRENT APPLICATION NUMBER: US/09/693,389
; CURRENT FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-18
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-09-693-389-75

Query Match 93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEFQGNQFOKQAISVLHEM 61
Db 1 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEFQGNQFOKQAISVLHEM 60
QY 62 IOQTFNLFTKDSAAWDESILLEKFTYELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 121
Db 61 IOQTFNLFTKDSAAWESQSLLEKFTSTELYQQLNDLEACVIOEVGVEETPLANNVDSILAV 120
QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLTNLQERLRKE 167
Db 121 RKYFORITLYLTKKYSKPCAWEVVRAEIMRSLFSFSTNLQKRLRRKD 166

RESULT 11
US-09-559-671A-75
; Sequence 75, Application US/09559671A
; Patent No. 6613514
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020503US
; CURRENT APPLICATION NUMBER: US/09/559,671A
; CURRENT FILING DATE: 2001-05-25
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-18
; PRIOR APPLICATION NUMBER: 08/198,431
; PRIOR FILING DATE: 1994-02-17
; PRIOR APPLICATION NUMBER: 08/425,684
; PRIOR FILING DATE: 1995-04-18
; PRIOR APPLICATION NUMBER: 08/537,874
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75

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/ LENGTH: 166
/ TYPE: PRT
/ ORGANISM: consensus alpha interferon
US-09-559-671A-75

Query Match          93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;

QY  2 CDLPQTHSLGNRRALILLAQMRRISPFSCCLKDRHDFGFPQEEFDGNGQFQKQAQAIISVLHEM 61
DB  1 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEEFDGNGQFQKQAQAIISVLHEM 60

QY  62 IQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 121
DB  61 IQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 120

QY  122 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKE 167
DB  121 RKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKD 166

RESULT 12
US-09-339-926A-75
/ Sequence 75, Application US/09339926A
/ Patent No. 6653072
/ GENERAL INFORMATION:
/ APPLICANT: Patten, Phillip
/ APPLICANT: Stemmer, Willem P.C.
/ TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
/ FILE REFERENCE: 02-020501US
/ CURRENT APPLICATION NUMBER: US/09/339,926A
/ CURRENT FILING DATE: 1999-06-24
/ PRIOR APPLICATION NUMBER: 08/769,062
/ PRIOR FILING DATE: 1996-12-18
/ PRIOR APPLICATION NUMBER: 08/198,431
/ PRIOR FILING DATE: 1994-02-17
/ PRIOR APPLICATION NUMBER: 08/425,684
/ PRIOR FILING DATE: 1995-04-18
/ PRIOR APPLICATION NUMBER: 08/537,874
/ PRIOR FILING DATE: 1995-10-30
/ NUMBER OF SEQ ID NOS: 101
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 75
/ LENGTH: 166
/ TYPE: PRT
/ ORGANISM: consensus alpha interferon
US-09-339-926A-75

Query Match          93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;

QY  2 CDLPQTHSLGNRRALILLAQMRRISPFSCCLKDRHDFGFPQEEFDGNGQFQKQAQAIISVLHEM 61
DB  1 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEEFDGNGQFQKQAQAIISVLHEM 60

QY  62 IQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 121
DB  61 IQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 120

QY  122 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKE 167
DB  121 RKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKD 166

RESULT 13
US-09-954-692-75
/ Sequence 75, Application US/09954692
/ Patent No. 6946296
/ GENERAL INFORMATION:
/ APPLICANT: Patten, Phillip
/ APPLICANT: Stemmer, Willem P.C.
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/ TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
/ FILE REFERENCE: 02-020500US
/ CURRENT APPLICATION NUMBER: US/09/954,692
/ CURRENT FILING DATE: 2001-09-12
/ PRIOR APPLICATION NUMBER: US/08/769,062
/ PRIOR FILING DATE: 1996-12-18
/ PRIOR APPLICATION NUMBER: 08/425,684
/ PRIOR FILING DATE: 1995-04-18
/ PRIOR APPLICATION NUMBER: 08/537,874
/ PRIOR FILING DATE: 1995-10-30
/ NUMBER OF SEQ ID NOS: 101
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 75
/ LENGTH: 166
/ TYPE: PRT
/ ORGANISM: consensus alpha interferon
US-09-954-692-75

Query Match          93.7%; Score 807; DB 2; Length 166;
Best Local Similarity 94.0%; Pred. No. 1.5e-84;
Matches 156; Conservative 5; Mismatches 5; Indels 0; Gaps 0;

QY  2 CDLPQTHSLGNRRALILLAQMRRISPFSCCLKDRHDFGFPQEEFDGNGQFQKQAQAIISVLHEM 61
DB  1 CDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEEFDGNGQFQKQAQAIISVLHEM 60

QY  62 IQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 121
DB  61 IQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 120

QY  122 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKE 167
DB  121 RKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKD 166

RESULT 14
US-06-256-204C-49
/ Sequence 49, Application US/06256204C
/ Patent No. 6610830
/ GENERAL INFORMATION:
/ APPLICANT: Goeddel, David V.
/ APPLICANT: Pestka, Sidney
/ TITLE OF INVENTION: MICROBIAL PRODUCTION OF MATURE HUMAN
/ TITLE OF INVENTION: LEUKOCYTE INTERFERONS
/ FILE REFERENCE: 1803-0025-999
/ CURRENT APPLICATION NUMBER: US/06/256,204C
/ CURRENT FILING DATE: 1981-04-21
/ NUMBER OF SEQ ID NOS: 85
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 49
/ LENGTH: 167
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-06-256-204C-49

Query Match          93.4%; Score 804; DB 2; Length 167;
Best Local Similarity 94.0%; Pred. No. 3.3e-84;
Matches 157; Conservative 3; Mismatches 7; Indels 0; Gaps 0;

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DB  1 MCDLPQTHSLGNRRALILLAQMGRISPFSCCLKDRHDFGFPQEEFDGNGQFQKQAQAIISVLHE 60

QY  61 MIQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 120
DB  61 MIQOTFNLFTKDSAAWDSLEKFKFTYELYQQLNDLEACVIOEVGVVEETPLMNVDSILAV 120

QY  121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKE 167
DB  121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSLSTNLQERLRKE 167

RESULT 15
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GenCore version 5.1.9
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OM protein - protein search, using sw model

Run on: September 1, 2006, 13:28:14 ; Search time 175 Seconds
(without alignments)
442.039 Million cell updates/sec

Title: US-10-650-365A-2
Perfect score: 861
Sequence: 1 MCDLPQTHSLGNRRALILLA.....EIMRFSLSLNQERLRKE 167

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2097797 seqs, 463214858 residues

Total number of hits satisfying chosen parameters: 2097797

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications_AA_Main:*
1: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
2: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
3: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
4: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
5: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
6: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US11_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	861	100.0	167	4	US-10-650-365A-2
2	861	100.0	167	5	US-10-928-956A-2
3	861	100.0	167	5	US-10-928-956A-2
4	861	100.0	167	6	US-11-132-722-58
5	861	100.0	167	6	US-11-077-813A-2
6	861	100.0	167	6	US-11-077-813A-2
7	856	99.4	166	5	US-10-714-817-43
8	856	99.4	166	6	US-11-046-440-25
9	839.5	97.5	165	4	US-10-658-834A-232
10	839.5	97.5	165	6	US-11-176-830-232
11	824	95.7	166	4	US-10-615-723-34
12	810	94.1	166	4	US-10-389-674-50
13	810	94.1	166	4	US-10-389-674-61
14	808	93.8	166	4	US-10-389-674-41
15	808	93.8	166	4	US-10-389-674-64
16	808	93.8	166	4	US-10-389-674-79
17	807	93.7	166	3	US-09-559-671A-75
18	807	93.7	166	3	US-09-554-692-75
19	807	93.7	166	4	US-10-389-674-40
20	807	93.7	166	4	US-10-389-674-43
21	807	93.7	166	4	US-10-389-674-46
22	807	93.7	166	4	US-10-389-674-83
23	807	93.7	166	4	US-10-667-772-75
24	807	93.7	166	5	US-10-646-221-75
25	807	93.7	166	5	US-10-667-868-75
26	807	93.7	166	6	US-11-198-765-75
27	805	93.5	166	4	US-10-389-674-63

28	804	93.4	166	4	US-10-389-674-38	Sequence 38, Appl
29	804	93.4	166	4	US-10-389-674-44	Sequence 44, Appl
30	804	93.4	166	4	US-10-389-674-84	Sequence 84, Appl
31	804	93.4	166	4	US-10-389-674-85	Sequence 85, Appl
32	803	93.3	166	4	US-10-389-674-62	Sequence 62, Appl
33	802	93.1	166	4	US-10-389-674-45	Sequence 45, Appl
34	802	93.1	166	4	US-10-389-674-51	Sequence 51, Appl
35	801	93.0	166	3	US-09-977-034-11	Sequence 11, Appl
36	801	93.0	166	3	US-09-977-034-19	Sequence 19, Appl
37	801	93.0	166	4	US-10-389-674-69	Sequence 69, Appl
38	801	93.0	166	4	US-10-389-674-70	Sequence 70, Appl
39	801	93.0	166	4	US-10-658-834A-187	Sequence 187, App
40	801	93.0	166	4	US-10-658-834A-194	Sequence 194, App
41	801	93.0	166	5	US-10-714-817-34	Sequence 34, Appl
42	801	93.0	166	5	US-10-714-817-42	Sequence 42, Appl
43	801	93.0	166	5	US-10-953-259-11	Sequence 11, Appl
44	801	93.0	166	5	US-10-953-259-19	Sequence 19, Appl
45	801	93.0	166	5	US-10-820-467-35	Sequence 35, Appl

ALIGNMENTS

RESULT 1
US-10-650-365A-2
; Sequence 2, Application US/10650365A
; Publication NO. US20040202641A1
; GENERAL INFORMATION:
; APPLICANT: Wei, Guangwen
; APPLICANT: Guo, Rongbing
; APPLICANT: Zhang, Renhua
; TITLE OF INVENTION: Recombinant Super-Compound Interferon
; FILE REFERENCE: 792-A-PCT-US
; CURRENT APPLICATION NUMBER: US/10/650,365A
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: PCT/CN02/00128
; PRIOR FILING DATE: 2002-02-28
; PRIOR APPLICATION NUMBER: CN 01104367.9
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 167
; TYPE: PRT
; ORGANISM: human synthesis
; US-10-650-365A-2

Query Match	100.0%	Score	861	DB	4	Length	167
Best Local Similarity	100.0%	Pred. No.	2.6e-81	Indels	0	Gaps	0
Matches	167	Conservative	0	Mismatches	0		
QY	1	MCDLPQTHSLGNRRALILLAQMRRISPFSCLDKRDHDFGFPQEEFDGNGQFOKAQAISVLHE	60				
Db	1	MCDLPQTHSLGNRRALILLAQMRRISPFSCLDKRDHDFGFPQEEFDGNGQFOKAQAISVLHE	60				
QY	61	MIQQTFLNFTSKDSSAAWDESLLEKPYTLYLQOLNDEACVIOEVGVETPLANNVSILA	120				
Db	61	MIQQTFLNFTSKDSSAAWDESLLEKPYTLYLQOLNDEACVIOEVGVETPLANNVSILA	120				
QY	121	VKKYQRIITLYLTKKYSFCANWVRAEIMRFSLSLNQERLRKE	167				
Db	121	VKKYQRIITLYLTKKYSFCANWVRAEIMRFSLSLNQERLRKE	167				

RESULT 2
US-10-928-956A-2
; Sequence 2, Application US/10928956A
; Publication NO. US20050169885A1
; GENERAL INFORMATION:
; APPLICANT: Wei, Guangwen
; TITLE OF INVENTION: Recombinant Super-Compound Interferon
; FILE REFERENCE: 792-C-US
; CURRENT APPLICATION NUMBER: US/10/928,956A

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/ CURRENT FILING DATE: 2004-08-26
/ PRIOR APPLICATION NUMBER: 60/498,449
/ PRIOR FILING DATE: 2003-08-28
/ PRIOR APPLICATION NUMBER: 280/MUM/2004
/ PRIOR FILING DATE: 2004-03-05
/ PRIOR APPLICATION NUMBER: 279/MUM/2004
/ PRIOR FILING DATE: 2004-03-05
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 2
/ LENGTH: 167
/ TYPE: PRT
/ ORGANISM: Artificial
/ FEATURE:
/ OTHER INFORMATION: Synthetic Construct
US-10-928-956A-2

Query Match      100.0%; Score 861; DB 5; Length 167;
Best Local Similarity 100.0%; Pred. No. 2.6e-81;
Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MCDLPOTHSIGNRRALILLAOMRISPPFSCCLKDRHDFGFPQBEFDGNOFQKQAISVLHE 60
DB      1 MCDLPOTHSIGNRRALILLAOMRISPPFSCCLKDRHDFGFPQBEFDGNOFQKQAISVLHE 60

QY      61 MIOQTFFNLSTKSSAAWDESLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILA 120
DB      61 MIOQTFFNLSTKSSAAWDESLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILA 120

QY      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167
DB      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167

RESULT 3
US-10-928-474A-2
/ Sequence 2, Application US/10928474A
/ Publication No. US20050208019A1
/ GENERAL INFORMATION:
/ APPLICANT: Wei, Guangwen
/ TITLE OF INVENTION: USES OF INTERFERONS WITH ALTERED SPATIAL STRUCTURE
/ FILE REFERENCE: 795-A-US
/ CURRENT APPLICATION NUMBER: US/10/928,474A
/ CURRENT FILING DATE: 2004-08-26
/ PRIOR APPLICATION NUMBER: 60/498,449
/ PRIOR FILING DATE: 2003-08-28
/ PRIOR APPLICATION NUMBER: 60/498,785
/ PRIOR FILING DATE: 2003-08-28
/ PRIOR APPLICATION NUMBER: 60/498,923
/ PRIOR FILING DATE: 2003-08-28
/ PRIOR APPLICATION NUMBER: 280/MUM/2004
/ PRIOR FILING DATE: 2004-03-05
/ PRIOR APPLICATION NUMBER: 279/MUM/2004
/ PRIOR FILING DATE: 2004-03-05
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 2
/ LENGTH: 167
/ TYPE: PRT
/ ORGANISM: Artificial
/ FEATURE:
/ OTHER INFORMATION: Synthetic Construct
US-10-928-474A-2

Query Match      100.0%; Score 861; DB 5; Length 167;
Best Local Similarity 100.0%; Pred. No. 2.6e-81;
Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MCDLPOTHSIGNRRALILLAOMRISPPFSCCLKDRHDFGFPQBEFDGNOFQKQAISVLHE 60
DB      1 MCDLPOTHSIGNRRALILLAOMRISPPFSCCLKDRHDFGFPQBEFDGNOFQKQAISVLHE 60

QY      61 MIOQTFFNLSTKSSAAWDESLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILA 120
DB      61 MIOQTFFNLSTKSSAAWDESLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILA 120

QY      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167
DB      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167
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DB      61 MIOQTFFNLSTKSSAAWDESLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILA 120
QY      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167
DB      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167

RESULT 4
US-11-132-722-58
/ Sequence 58, Application US/11132722
/ Publication No. US20050266465A1
/ GENERAL INFORMATION:
/ APPLICANT: Patten, Phillip A., et al.
/ TITLE OF INVENTION: INTERFERON-ALPHA POLYPEPTIDES AND
/ TITLE OF INVENTION: CONJUGATES
/ FILE REFERENCE: 0280.310US
/ CURRENT APPLICATION NUMBER: US/11/132,722
/ CURRENT FILING DATE: 2005-05-18
/ PRIOR APPLICATION NUMBER: US 60/572,504
/ PRIOR FILING DATE: 2004-05-19
/ NUMBER OF SEQ ID NOS: 90
/ SOFTWARE: PastSeq for Windows Version 4.0
/ SEQ ID NO 58
/ LENGTH: 167
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic Construct IFN-alpha Conl
US-11-132-722-58

Query Match      100.0%; Score 861; DB 6; Length 167;
Best Local Similarity 100.0%; Pred. No. 2.6e-81;
Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MCDLPOTHSIGNRRALILLAOMRISPPFSCCLKDRHDFGFPQBEFDGNOFQKQAISVLHE 60
DB      1 MCDLPOTHSIGNRRALILLAOMRISPPFSCCLKDRHDFGFPQBEFDGNOFQKQAISVLHE 60

QY      61 MIOQTFFNLSTKSSAAWDESLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILA 120
DB      61 MIOQTFFNLSTKSSAAWDESLEKFTYELYQQLNDLEACVIOEVGVETPLMNVDSILA 120

QY      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167
DB      121 VKKYFORITLYLTKKYSPCAWEVVRAEIMRSPFSLSTNLQERLRKE 167

RESULT 5
US-11-077-813A-2
/ Sequence 2, Application US/11077813A
/ Publication No. US2006003537A1
/ GENERAL INFORMATION:
/ APPLICANT: Wei, Guangwen
/ TITLE OF INVENTION: RECOMBINANT SUPER-COMPOUND INTERFERON AND USES THEREOF
/ FILE REFERENCE: 1005-A-US
/ CURRENT APPLICATION NUMBER: US/11/077,813A
/ CURRENT FILING DATE: 2005-03-10
/ PRIOR APPLICATION NUMBER: PCT/CN02/00128
/ PRIOR FILING DATE: 2002-02-28
/ PRIOR APPLICATION NUMBER: 60/659925
/ PRIOR FILING DATE: 2005-03-09
/ PRIOR APPLICATION NUMBER: 10/927,975
/ PRIOR FILING DATE: 2004-08-26
/ PRIOR APPLICATION NUMBER: 60/498,449
/ PRIOR FILING DATE: 2003-08-28
/ PRIOR APPLICATION NUMBER: 60/498,785
/ PRIOR FILING DATE: 2003-08-28
/ PRIOR APPLICATION NUMBER: 60/498,923
/ PRIOR FILING DATE: 2003-08-28
/ PRIOR APPLICATION NUMBER: 10/650,365
/ PRIOR FILING DATE: 2003-08-28
```

;; PRIOR APPLICATION NUMBER: CN 01104367.9
;; PRIOR FILING DATE: 2001-02-28
;; PRIOR APPLICATION NUMBER: 279/MUM/2004
;; PRIOR FILING DATE: 2004-03-05
;; PRIOR APPLICATION NUMBER: 280/MUM/2004
;; PRIOR FILING DATE: 2004-03-05
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 16
;; SOFTWARE: Patent in version 3.2
;; SEQ ID NO 2:
;; LENGTH: 167
;; TYPE: PRT
;; ORGANISM: human synthesis
US-11-077-813A-2

Query Match 100.0%; Score 861; DB 6; Length 167;
Best Local Similarity 100.0%; Pred. No. 2.6e-81;
Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MCDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGPPQEEFDGNGQFQKAQAISVLHE 60
DB 1 MCDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGPPQEEFDGNGQFQKAQAISVLHE 60
QY 61 MIQOTFNLFSTKSSAAWDESLLKFFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILA 120
DB 61 MIQOTFNLFSTKSSAAWDESLLKFFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILA 120
QY 121 VKKYFORITLYLTKKYSPCAEVVRRAEIMRFSLSLTLNQLERLRKE 167
DB 121 VKKYFORITLYLTKKYSPCAEVVRRAEIMRFSLSLTLNQLERLRKE 167

RESULT 6
US-11-077-813A-15
;; Sequence 15, Application US/11077813A
;; Publication No. US20060035327A1
;; GENERAL INFORMATION:
;; APPLICANT: Wei, Guangwen
;; TITLE OF INVENTION: RECOMBINANT SUPER-COMPOUND INTERPERON AND USES THEREOF
;; CURRENT APPLICATION NUMBER: US/11/077,813A
;; CURRENT FILING DATE: 2005-03-10
;; PRIOR APPLICATION NUMBER: PCT/CN02/00128
;; PRIOR FILING DATE: 2002-02-28
;; PRIOR APPLICATION NUMBER: 60/659925
;; PRIOR FILING DATE: 2005-03-09
;; PRIOR APPLICATION NUMBER: 10/927,975
;; PRIOR FILING DATE: 2004-08-26
;; PRIOR APPLICATION NUMBER: 60/498,449
;; PRIOR FILING DATE: 2003-08-28
;; PRIOR APPLICATION NUMBER: 60/498,785
;; PRIOR FILING DATE: 2003-08-28
;; PRIOR APPLICATION NUMBER: 60/498,923
;; PRIOR FILING DATE: 2003-08-28
;; PRIOR APPLICATION NUMBER: 10/650,365
;; PRIOR FILING DATE: 2003-08-28
;; PRIOR APPLICATION NUMBER: CN 01104367.9
;; PRIOR FILING DATE: 2001-02-28
;; PRIOR APPLICATION NUMBER: 279/MUM/2004
;; PRIOR FILING DATE: 2004-03-05
;; PRIOR APPLICATION NUMBER: 280/MUM/2004
;; PRIOR FILING DATE: 2004-03-05
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 16
;; SOFTWARE: Patent in version 3.2
;; SEQ ID NO 15:
;; LENGTH: 167
;; TYPE: PRT
;; ORGANISM: human synthesis
US-11-077-813A-15
Query Match 100.0%; Score 861; DB 6; Length 167;

Best Local Similarity 100.0%; Pred. No. 2.6e-81;
Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MCDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGPPQEEFDGNGQFQKAQAISVLHE 60
DB 1 MCDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGPPQEEFDGNGQFQKAQAISVLHE 60
QY 61 MIQOTFNLFSTKSSAAWDESLLKFFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILA 120
DB 61 MIQOTFNLFSTKSSAAWDESLLKFFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILA 120
QY 121 VKKYFORITLYLTKKYSPCAEVVRRAEIMRFSLSLTLNQLERLRKE 167
DB 121 VKKYFORITLYLTKKYSPCAEVVRRAEIMRFSLSLTLNQLERLRKE 167

RESULT 7
US-10-714-817-43
;; Sequence 43, Application US/10714817
;; Publication No. US20040219131A1
;; GENERAL INFORMATION:
;; APPLICANT: Patten, Phillip A. et al.
;; TITLE OF INVENTION: Interferon-Alpha Polypeptides and Conjugates
;; FILE REFERENCE: 0269us310
;; CURRENT APPLICATION NUMBER: US/10/714,817
;; CURRENT FILING DATE: 2003-11-17
;; PRIOR APPLICATION NUMBER: US 60/502,560
;; PRIOR FILING DATE: 2003-09-12
;; PRIOR APPLICATION NUMBER: US 60/427,612
;; PRIOR FILING DATE: 2002-11-18
;; NUMBER OF SEQ ID NOS: 104
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 43
;; LENGTH: 166
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: IFNalpha-Conl
US-10-714-817-43

Query Match 99.4%; Score 856; DB 5; Length 166;
Best Local Similarity 100.0%; Pred. No. 8.6e-81;
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGPPQEEFDGNGQFQKAQAISVLHE 61
DB 1 CDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGPPQEEFDGNGQFQKAQAISVLHE 60
QY 62 IQOTFNLFSTKSSAAWDESLLKFFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTKSSAAWDESLLKFFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAEVVRRAEIMRFSLSLTLNQLERLRKE 167
DB 121 KKYFORITLYLTKKYSPCAEVVRRAEIMRFSLSLTLNQLERLRKE 166

RESULT 8
US-11-046-440-25
;; Sequence 25, Application US/11046440
;; Publication No. US20050220762A1
;; GENERAL INFORMATION:
;; APPLICANT: Cho, Ho S
;; APPLICANT: Daniel, Thomas
;; APPLICANT: Hays, Anna-Maria
;; APPLICANT: Wilson, Troy
;; TITLE OF INVENTION: Modified Human Interferon Polypeptides and Their Uses
;; FILE REFERENCE: AMEX-0030.00US
;; CURRENT APPLICATION NUMBER: US/11/046,440
;; CURRENT FILING DATE: 2005-01-28
;; PRIOR APPLICATION NUMBER: 60/541,528
;; PRIOR FILING DATE: 2004-02-02
;; PRIOR APPLICATION NUMBER: 60/581,314

;; PRIOR FILING DATE: 2004-06-18
;; PRIOR APPLICATION NUMBER: 60/581,175
;; PRIOR FILING DATE: 2004-06-18
;; PRIOR APPLICATION NUMBER: 60/580,885
;; PRIOR FILING DATE: 2004-06-18
;; PRIOR APPLICATION NUMBER: 60/638,616
;; PRIOR FILING DATE: 2004-12-22
;; NUMBER OF SEQ ID NOS: 27
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 25
;; LENGTH: 166
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-11-046-440-25

Query Match 99.4%; Score 856; DB 6; Length 166;
Best Local Similarity 100.0%; Pred. No. 8.6e-81; Indels 0; Gaps 0;
Matches 166; Conservative 0; Mismatches 0;

QY 2 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 60

QY 62 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120

QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 167
DB 121 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 166

RESULT 9
US-10-658-834A-232
;; Sequence 232, Application US/10658834A
;; Publication No. US20040132977A1
;; GENERAL INFORMATION:
;; APPLICANT: Gantier, Rene
;; APPLICANT: Guyon, Thierry
;; APPLICANT: Drittanti, Lila
;; APPLICANT: Vega, Manuel
;; TITLE OF INVENTION: Rational Evolution of Cytokines for Higher Stability, Encoding N
;; TITLE OF INVENTION: Acid
;; FILE REFERENCE: 38751-922
;; CURRENT APPLICATION NUMBER: US/10/658,834A
;; CURRENT FILING DATE: 2003-09-08
;; PRIOR APPLICATION NUMBER: 60/457,135
;; PRIOR FILING DATE: 2003-03-21
;; PRIOR APPLICATION NUMBER: 60/409,898
;; PRIOR FILING DATE: 2002-09-09
;; NUMBER OF SEQ ID NOS: 1306
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 232
;; LENGTH: 165
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Interferon alpha consensus sequence
US-10-658-834A-232

Query Match 97.5%; Score 839.5; DB 4; Length 165;
Best Local Similarity 99.4%; Pred. No. 4.5e-79;
Matches 165; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 2 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 59

QY 62 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 60 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 119

Query Match 97.5%; Score 839.5; DB 4; Length 165;
Best Local Similarity 99.4%; Pred. No. 4.5e-79;
Matches 165; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 2 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 59

QY 62 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 60 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 119

QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 167
DB 120 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 165

RESULT 10
US-11-176-830-232
;; Sequence 232, Application US/11176830
;; Publication No. US20060020116A1
;; GENERAL INFORMATION:
;; APPLICANT: Gantier, Rene
;; APPLICANT: Guyon, Thierry
;; APPLICANT: Drittanti, Lila
;; APPLICANT: Vega, Manuel
;; TITLE OF INVENTION: Rational Evolution of Cytokines for Higher Stability, Encoding N
;; TITLE OF INVENTION: Acid Molecules and Related Applications
;; FILE REFERENCE: 17109-012002 (922B)
;; CURRENT APPLICATION NUMBER: US/11/176,830
;; CURRENT FILING DATE: 2005-07-06
;; PRIOR APPLICATION NUMBER: 10/658,834
;; PRIOR FILING DATE: 2003-09-08
;; PRIOR APPLICATION NUMBER: 60/457,135
;; PRIOR FILING DATE: 2003-03-21
;; PRIOR APPLICATION NUMBER: 60/409,898
;; PRIOR FILING DATE: 2002-09-09
;; NUMBER OF SEQ ID NOS: 1306
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 232
;; LENGTH: 165
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Interferon alpha consensus sequence
US-11-176-830-232

Query Match 97.5%; Score 839.5; DB 6; Length 165;
Best Local Similarity 99.4%; Pred. No. 4.5e-79;
Matches 165; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 2 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQMRISPPSCCLKDRHDFGFPQEEFDGNGFQKQAQAIISVLHEM 59

QY 62 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 60 IQOTFNLFSKDSAAWDESLLEKFYTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 119

QY 122 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 167
DB 120 KKYFORITLYLTKKYSKPCAWEVVRAEIMRSPSLSTNLQERLRKE 165

RESULT 11
US-10-615-723-34
;; Sequence 34, Application US/10615723
;; Publication No. US20040018172A1
;; GENERAL INFORMATION:
;; APPLICANT: Zoon, et al.
;; TITLE OF INVENTION: Interferon Alpha Hybrids
;; FILE REFERENCE: 4239-56957
;; CURRENT APPLICATION NUMBER: US/10/615,723
;; CURRENT FILING DATE: 2003-07-08
;; PRIOR APPLICATION NUMBER: US/09/744,754C
;; PRIOR FILING DATE: 2001-01-24
;; PRIOR APPLICATION NUMBER: US 60/094,407
;; PRIOR FILING DATE: 1998-07-28
;; PRIOR APPLICATION NUMBER: PCT/US99/15284
;; PRIOR FILING DATE: 1999-07-06
;; NUMBER OF SEQ ID NOS: 42
;; SOFTWARE: PatentIn version 3.2
;; SEQ ID NO 34
;; LENGTH: 166
;; TYPE: PRT

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; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Gene Fusion
US-10-615-723-34

Query Match          95.7%; Score 824; DB 4; Length 166;
Best Local Similarity 96.4%; Pred. No. 1.8e-77;
Matches 160; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMGRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 60

QY 62 IQOTFNLFSTKDSNAWDESILLEKFTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 121
DB 61 IQOTFNLFSTKDSNAWDETLLDKFTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 120

QY 122 KKYFORITLYLTEKKYSPCAWVVRRAEIMRSPSLTNLQERLRKE 167
DB 121 KKYFORITLYLTEKKYSPCAWVVRRAEIMRSPSLTNLQERLRKE 166

RESULT 12
US-10-389-674-50
; Sequence 50, Application US/10389674
; Publication No. US20040002474A1
; GENERAL INFORMATION:
; APPLICANT: CHEN, TEDDY
; APPLICANT: PATTEN, PHILLIP A.
; TITLE OF INVENTION: IFN-ALPHA HOMOLOGUES
; FILE REFERENCE: 02-101510/0140.002
; CURRENT APPLICATION NUMBER: US/10/389,674
; PRIOR FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: US/09/685,189
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: 09/415,183
; PRIOR FILING DATE: 1999-10-07
; NUMBER OF SEQ ID NOS: 88
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 50
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic amino acid
; OTHER INFORMATION: Clone ID 3CA1
US-10-389-674-50

Query Match          94.1%; Score 810; DB 4; Length 166;
Best Local Similarity 94.6%; Pred. No. 5.3e-76;
Matches 157; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMGRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 60

QY 62 IQOTFNLFSTKDSNAWDESILLEKFTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 121
DB 61 IQOTFNLFSTKDSNAWDETLLDKFTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 120

QY 122 KKYFORITLYLTEKKYSPCAWVVRRAEIMRSPSLTNLQERLRKE 167
DB 121 KKYFORITLYLTEKKYSPCAWVVRRAEIMRSPSLTNLQERLRKE 166

RESULT 13
US-10-389-674-61
; Sequence 61, Application US/10389674
; Publication No. US20040002474A1
; GENERAL INFORMATION:
; APPLICANT: HEINRICH, VOLKER
; APPLICANT: PATTEN, PHILLIP A.
; TITLE OF INVENTION: IFN-ALPHA HOMOLOGUES
; FILE REFERENCE: 02-101510/0140.002
; CURRENT APPLICATION NUMBER: US/10/389,674
; PRIOR FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: US/09/685,189
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: 09/415,183
; PRIOR FILING DATE: 1999-10-07
; NUMBER OF SEQ ID NOS: 88
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 50
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic amino acid
; OTHER INFORMATION: Clone ID 3CA1
US-10-389-674-50

Query Match          94.1%; Score 810; DB 4; Length 166;
Best Local Similarity 94.6%; Pred. No. 5.3e-76;
Matches 157; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMGRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 60

QY 62 IQOTFNLFSTKDSNAWDESILLEKFTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 121
DB 61 IQOTFNLFSTKDSNAWDETLLDKFTYELYQQLNDLEACVIOEVGVEETPLMNVDSILAV 120

QY 122 KKYFORITLYLTEKKYSPCAWVVRRAEIMRSPSLTNLQERLRKE 167
DB 121 KKYFORITLYLTEKKYSPCAWVVRRAEIMRSPSLTNLQERLRKE 166

RESULT 14
US-10-389-674-41
; Sequence 41, Application US/10389674
; Publication No. US20040002474A1
; GENERAL INFORMATION:
; APPLICANT: HEINRICH, VOLKER
; APPLICANT: CHEN, TEDDY
; APPLICANT: PATTEN, PHILLIP A.
; TITLE OF INVENTION: IFN-ALPHA HOMOLOGUES
; FILE REFERENCE: 02-101510/0140.002
; CURRENT APPLICATION NUMBER: US/10/389,674
; PRIOR FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: US/09/685,189
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: 09/415,183
; PRIOR FILING DATE: 1999-10-07
; NUMBER OF SEQ ID NOS: 88
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 41
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic amino acid
; OTHER INFORMATION: Clone ID 2DB11
US-10-389-674-41

Query Match          93.8%; Score 808; DB 4; Length 166;
Best Local Similarity 94.0%; Pred. No. 8.5e-76;
Matches 156; Conservative 6; Mismatches 4; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMGRISPPFSCDKRHDGFGPQEEFDGNGQFQKQAIAISVLHEM 60
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Db 1 CDLPQTHSLGNRRALMLLAQMGRISSPFCCLKDRYDFGPQEEFDGNGQFQKQAQAI SVLHEM 60
QY 62 IQOTFNLFSKDSAAWDESLLEKFTYELYQQNLNDLEACVIOEVGVETPLMNVDSILAV 121
Db 61 IQOTFNLFSKDSAAWDESLLEKFTYELYQQNLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
Db 121 RKYFORITLYLTKKYSPCAWEVVRAEIMRSFSTNLQERLRKE 166

RESULT 15

US-10-389-674-64
; Sequence 64, Application US/10389674
; Publication No. US2004000247A1
; GENERAL INFORMATION:
; APPLICANT: HEINRICH, VOLKER
; APPLICANT: CHEN, TEDDY
; APPLICANT: PATTEN, PHILLIP A.
; TITLE OF INVENTION: IFN-ALPHA HOMOLOGUES
; FILE REFERENCE: 02-101510/0140.002
; CURRENT APPLICATION NUMBER: US/10/389,674
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: US/09/685,189
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: 09/415,183
; PRIOR FILING DATE: 1999-10-07
; NUMBER OF SEQ ID NOS: 88
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 64
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic amino acid
; OTHER INFORMATION: Clone ID 2D9
US-10-389-674-64

Query Match 93.8%; Score 808; DB 4; Length 166;
Best Local Similarity 94.8%; Pred. No. 8.5e-76;
Matches 157; Conservative 4; Mismatches 5; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALMLLAQMGRISSPFCCLKDRHDFGPQEEFDGNGQFQKQAQAI SVLHEM 61
Db 1 CDLPQTHSLGNRRALMLLAQMGRISSPFCCLKDRHDFGPQEEFDGNGQFQKQAQAI SVLHEM 60
QY 62 IQOTFNLFSKDSAAWDESLLEKFTYELYQQNLNDLEACVIOEVGVETPLMNVDSILAV 121
Db 61 IQOTFNLFSKDSAAWDESLLEKFTYELYQQNLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWEVVRAEIMRSFSLSTNLQERLRKE 167
Db 121 KKYFORITLYLTKKYSPCAWEVVRAEIMRSFSTNLQERLRKE 166

Search completed: September 1, 2006, 13:31:53
Job time : 176 secs

November 2005

Published_Applications_Nucleic Acid and Published_Applications_Amino Acid database searches now generate two sets of results each. The Published_Applications_databases have been split into two parts to reduce the amount of time required for their daily updates. This results in more machine time being available for processing searches.

Newly published applications will appear in the Published_Applications_New databases: older published applications make up the Published_Applications_Main databases.

Searches run against Nucleic Acid Published_Applications produce two sets of results, with the extensions **.rnpbm** (Published_Applications_NA_Main) and **.rnpbn** (Published_Applications_NA_New).
Searches run against Amino Acid Published_Applications produce two sets of results, with the extensions **.rapbm** (Published_Applications_AA_Main) and **.rapbn** (Published_Applications_AA_New).

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OM protein - protein search, using sw model

Run on: September 1, 2006, 13:29:08 ; Search time 32 Seconds
(without alignments)
359.431 Million cell updates/sec

Title: US-10-650-365A-2

Perfect score: 861

Sequence: 1 MCDLPQTHSLGNRRALILLA.....EIMRFSLSLTLQERLRKE 167

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 250042 seqs, 68872936 residues

Total number of hits satisfying chosen parameters: 250042

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA New:*

- 1: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/US09_NEW_PUB.pdb:*
- 2: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/US06_NEW_PUB.pdb:*
- 3: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/US07_NEW_PUB.pdb:*
- 4: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/US08_NEW_PUB.pdb:*
- 5: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/ECT_NEW_PUB.pdb:*
- 6: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/US10_NEW_PUB.pdb:*
- 7: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/US11_NEW_PUB.pdb:*
- 8: /EMC_Celerra_SIDS3/ptodata/1/pubpaa/US60_NEW_PUB.pdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	839.5	97.5	165	7	US-11-330-917-232
2	807	93.7	166	7	US-11-136-115-75
3	801	93.0	166	7	US-11-330-917-187
4	801	93.0	166	7	US-11-330-917-194
5	793	92.1	166	7	US-11-136-115-84
6	788	91.5	166	7	US-11-136-115-79
7	788	91.5	166	7	US-11-330-917-190
8	786	91.3	166	7	US-11-330-917-189
9	780	90.6	166	7	US-11-136-115-76
10	777	90.2	166	7	US-11-330-917-191
11	776	90.1	166	7	US-11-330-917-183
12	770	89.4	166	7	US-11-136-115-78
13	768	89.2	166	7	US-11-330-917-193
14	767	89.1	166	7	US-11-136-115-77
15	767	89.1	166	7	US-11-136-115-85
16	754	87.6	166	7	US-11-136-115-81
17	754	87.6	166	7	US-11-330-917-192
18	753.5	87.5	165	7	US-11-330-917-111
19	753	87.5	166	7	US-11-136-115-80
20	753	87.5	166	7	US-11-330-917-188
21	752.5	87.4	166	6	US-10-933-854-12
22	751.5	87.3	165	7	US-11-330-917-13
23	751.5	87.3	165	7	US-11-330-917-37
24	750.5	87.2	165	7	US-11-330-917-80
25	749.5	87.0	165	7	US-11-330-917-21

26	749.5	87.0	165	7	US-11-330-917-39	Sequence 39, Appl
27	749.5	87.0	165	7	US-11-330-917-79	Sequence 79, Appl
28	748.5	86.9	165	7	US-11-330-917-46	Sequence 46, Appl
29	748.5	86.9	165	7	US-11-330-917-137	Sequence 137, Appl
30	748.5	86.9	165	7	US-11-330-917-173	Sequence 173, Appl
31	747.5	86.8	165	7	US-11-370-555-30	Sequence 30, Appl
32	747.5	86.8	165	7	US-11-330-917-1	Sequence 1, Appl
33	747.5	86.8	165	7	US-11-330-917-100	Sequence 100, Appl
34	747.5	86.8	165	7	US-11-330-917-110	Sequence 110, Appl
35	747.5	86.8	165	7	US-11-363-637-30	Sequence 30, Appl
36	747.5	86.8	188	7	US-11-183-218-4	Sequence 4, Appl
37	747.5	86.8	192	6	US-10-568-332-14	Sequence 14, Appl
38	747.5	86.8	196	7	US-11-036-257-83	Sequence 83, Appl
39	747.5	86.8	201	7	US-11-036-257-79	Sequence 79, Appl
40	747.5	86.8	206	7	US-11-036-257-81	Sequence 81, Appl
41	747.5	86.8	209	7	US-11-036-257-65	Sequence 65, Appl
42	747.5	86.8	226	7	US-11-036-257-87	Sequence 87, Appl
43	747.5	86.8	231	7	US-11-036-257-85	Sequence 85, Appl
44	747.5	86.8	539	7	US-11-244-349B-37	Sequence 37, Appl
45	747	86.8	166	7	US-11-136-115-83	Sequence 83, Appl

ALIGNMENTS

RESULT 1
US-11-330-917-232
; Sequence 232, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; APPLICANT: Blatt, Lawrence M.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Vari:
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; PRIOR FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 232
; LENGTH: 165
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Interferon alpha consensus sequence

Query Match	97.5%	Score 839.5	DB 7	Length 165
Best Local Similarity	99.4%	Pred. No. 1.2e-74		
Matches 165	Conservative 0	Mismatches 0	Indels 1	Gaps 1
Qy	2	CDLPQTHSLGNRRALILLAQMRRIISPFSCSKDRHDPGPPQBEFDGNGQKQAKAISVLHEM	61	
Db	1	CDLPQTHSLGNRRALILLAQMRRIISPFSCSKDRHDPG-PQBEFDGNGQKQAKAISVLHEM	59	
Qy	62	IQQTFNLPSTKDSAAWDESLLEKPYTELQQLNDLACVLOEYGVETPLMNVDLSILAV	121	
Db	60	IQQTFNLPSTKDSAAWDESLLEKPYTELQQLNDLACVLOEYGVETPLMNVDLSILAV	119	
Qy	122	KKYFORITLYLTKKYSFPCAWEVVRAIMRFSLSLTLQERLRKE	167	
Db	120	KKYFORITLYLTKKYSFPCAWEVVRAIMRFSLSLTLQERLRKE	165	

RESULT 2

```

US-11-136-115-75
; Sequence 75, Application US/11136115
; Publication NO. US20060166225A1
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, William P. C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-0205010US
; CURRENT APPLICATION NUMBER: US/11/136,115
; CURRENT FILING DATE: 2005-05-24
; PRIOR APPLICATION NUMBER: US/09/339,926
; PRIOR FILING DATE: 1999-06-24
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-18
; PRIOR APPLICATION NUMBER: 08/198,431
; PRIOR FILING DATE: 1994-02-17
; PRIOR APPLICATION NUMBER: 08/425,684
; PRIOR FILING DATE: 1995-04-18
; PRIOR APPLICATION NUMBER: 08/537,874
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
; LENGTH: 166
; TYPE: PRT
; ORGANISM: consensus alpha interferon
US-11-136-115-75

```

	Query Match	93.7%	Score 807;	DB 7;	Length 166;
	Best Local Similarity	94.0%;	Pred. No. 1.8e-71;		
	Matches 156;	Conservative 5;	Mismatches 5;	Indels 0;	Gaps 0;
Qy	2	CDLPOTHSLGNRRALILLAQWRRLSPESCLKORHDFGPQEEFPGNOFOKQAQISVLHEM	61		
Dd	1	CDLPOTHSLGNRRALILLAQWRRLSPESCLKORHDFGPQEEFPGNOFOKQAQISVLHEM	60		
Qy	62	IQOTFNLSTKDSAAWDESILLEKFYELYQQLNDLEACVTIQEVGVSEETPLMNVDLSILAV	121		
Dd	61	IQOTFNLSTKDSAAWESQILLEKFSTELYQQLNDLEACVTIQEVGVSEETPLMNVDLSILAV	120		
Qy	122	KKYFQRIITLYLTCKYSPCAWEVVRAIMRSFSISLTNLQERLRKE	167		
Dd	121	RKYFQRIITLYLTCKYSPCAWEVVRAIMRSFSISLTNLQERLRKE	166		

RESULT 3

```

US-11-330-917-187
; Sequence 187, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; APPLICANT: Blatt, Lawrence M.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 187
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Homo sapiens

```

US-11-330-917-187

	Query Match	93.0%;	Score 801;	DB 7;	Length 166;
	Best Local Similarity	91.0%;	Pred. No. 6.8e-71;		
	Matches 151;	Conservative	9;	Mismatches 6;	Indels 0; Gaps 0;
Qy	2	CDLPQTHSGNREALILLACMBRISPSCLKORHDFGFPQEEFDGNOFKAKAIAISVLHEM	61		
Db	1	CDLPQTHSGNRRRLIMAGMRISPSCLKORHDFGFPQEEFDGNOFKAKAIAISVLHEM	60		
Qy	62	IQOTFNLFSKTOSSAAWDSLLKFKETELYQQIINDLEACVIOGVGVEETPLMNVDISILAV	121		
Db	61	IQOTFNLFSKTOSSATWDETLDDKFTTELYQQIINDLEACQMEVGVEDPPLMNVDISILTV	120		
Qy	122	KKYFQRITLYLTKKYSPCAEWVRAEIMRSPFSLSTNLQERLARKE	167		
Db	121	KKYFQRITLYLTKKYSPCAEWVRAEIMRSPFSLSTNLQERLARKE	166		

RESULT 4

```

US-11-330-917-194
; Sequence 194, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; APPLICANT: Blatt, Lawrence M.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTW-0600W0
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 194
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-330-917-194

```

		Query Match	93.0%; Score 801; DB 7; Length 166;	
		Best Local Similarity	94.6%; Pred. No. 6.8e-71;	
		Matches 157; Conservative	2; Mismatches 7; Indels 0; Gaps 0;	
Qy	2	CDDLPOTHSLGNRRALILLAQMRRISSPSCCLKORHDFGFPQEERPDGNQFQAQAISVLHEM	61	
Dd	1	CDDLPOTHSLGNRRALILLAQMRGISPPSCLKORHDFGFPQEERPDGNQFQAQAISVLHEM	60	
Qy	62	IQOTFNLFSTKOSSAAWDSLSLEKFTELYQQLNLDLEACVIQEVGVYEETPLMNVDLSILAV	121	
Dd	61	IQOTFNLFSTKOSSATWGSGLSLEKFSSTELNQNLNDEACVIEVGVEEYPLMNVDLSILAV	120	
Qy	122	KKYFORITLYLTKCYSPCAWEVVRAIRMSFSLSTNLQERLRKE	167	
Dd	121	KKYFORITLYLTKCYSPCAWEVVRAIRMSFSLSKIPOFERLRKE	166	

PRCIN.T 5

```

RESULT 5
US-11-136-115-84
; Sequence 84, Application US/11136115
; Publication NO. US20060166225A1
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING

```

FILE REFERENCE: 02-020501US
CURRENT APPLICATION NUMBER: US/11/136,115
CURRENT FILING DATE: 2005-05-24
PRIOR APPLICATION NUMBER: US/09/339,926
PRIOR FILING DATE: 1999-06-24
PRIOR APPLICATION NUMBER: 08/769,062
PRIOR FILING DATE: 1996-12-18
PRIOR APPLICATION NUMBER: 08/198,431
PRIOR FILING DATE: 1994-02-17
PRIOR APPLICATION NUMBER: 08/425,684
PRIOR FILING DATE: 1995-04-18
PRIOR APPLICATION NUMBER: 08/537,874
PRIOR FILING DATE: 1995-10-30
NUMBER OF SEQ ID NOS: 101
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 84
LENGTH: 166
TYPE: PRT
ORGANISM: human alpha interferon
US-11-136-115-84

Query Match 92.1%; Score 793; DB 7; Length 166;
Best Local Similarity 93.9%; Pred. No. 4.1e-70;
Matches 155; Conservative 3; Mismatches 7; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFPQEEFDGNGQKQAQAIISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFPQEEFDGNGQKQAQAIISVLHEM 60
QY 62 IQQTFNLFSTKDSAAWDESLLKPYTTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQQTFNLFSTKDSAAWDESLLKPYTTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSFCWAEVVRRAEIMRSFSLSTNQLQERLRK 166
DB 121 KKYFORITLYLTKKYSFCWAEVVRRAEIMRSFSLSTNQLQERLRK 165

RESULT 6
US-11-136-115-79
Sequence 79, Application US/11/136,115
Publication No. US20060166225A1
GENERAL INFORMATION:
APPLICANT: Patten, Phillip
APPLICANT: Stemmer, Willem P.C.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
FILE REFERENCE: 02-020501US
CURRENT APPLICATION NUMBER: US/11/136,115
CURRENT FILING DATE: 2005-05-24
PRIOR APPLICATION NUMBER: US/09/339,926
PRIOR FILING DATE: 1999-06-24
PRIOR APPLICATION NUMBER: 08/769,062
PRIOR FILING DATE: 1996-12-18
PRIOR APPLICATION NUMBER: 08/198,431
PRIOR FILING DATE: 1994-02-17
PRIOR APPLICATION NUMBER: 08/425,684
PRIOR FILING DATE: 1995-04-18
PRIOR APPLICATION NUMBER: 08/537,874
PRIOR FILING DATE: 1995-10-30
NUMBER OF SEQ ID NOS: 101
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 79
LENGTH: 166
TYPE: PRT
ORGANISM: human alpha interferon
US-11-136-115-79

Query Match 91.5%; Score 788; DB 7; Length 166;
Best Local Similarity 91.6%; Pred. No. 1.3e-69;
Matches 152; Conservative 8; Mismatches 6; Indels 0; Gaps 0;
QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFPQEEFDGNGQKQAQAIISVLHEM 61

DB 1 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFPQEEFDGNGQKQAQAIISVLHEM 60
QY 62 IQQTFNLFSTKDSAAWDESLLKPYTTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQQTFNLFSTKDSAAWDESLLKPYTTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSFCWAEVVRRAEIMRSFSLSTNQLQERLRK 167
DB 121 KKYFORITLYLTKKYSFCWAEVVRRAEIMRSFSLSTNQLQERLRK 166

RESULT 7

US-11-330-917-190
Sequence 190, Application US/11/330,917
Publication No. US20060182716A1
GENERAL INFORMATION:
APPLICANT: Hong, Jin
APPLICANT: Seiwert, Scott D.
APPLICANT: Blatt, Lawrence M.
TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
FILE REFERENCE: INTM-060WO
CURRENT APPLICATION NUMBER: US/11/330,917
CURRENT FILING DATE: 2006-01-11
PRIOR APPLICATION NUMBER: 60/600,202
PRIOR FILING DATE: 2004-08-09
PRIOR APPLICATION NUMBER: 60/600,134
PRIOR FILING DATE: 2004-08-09
PRIOR APPLICATION NUMBER: 60/604,280
PRIOR FILING DATE: 2004-08-24
PRIOR APPLICATION NUMBER: 60/604,415
PRIOR FILING DATE: 2004-08-24
NUMBER OF SEQ ID NOS: 1354
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 190
LENGTH: 166
TYPE: PRT
ORGANISM: Homo sapiens
US-11-330-917-190

Query Match 91.5%; Score 788; DB 7; Length 166;
Best Local Similarity 91.6%; Pred. No. 1.3e-69;
Matches 152; Conservative 8; Mismatches 6; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFPQEEFDGNGQKQAQAIISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMRRISPPFSCDKRHDGFPQEEFDGNGQKQAQAIISVLHEM 60
QY 62 IQQTFNLFSTKDSAAWDESLLKPYTTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQQTFNLFSTKDSAAWDESLLKPYTTELYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSFCWAEVVRRAEIMRSFSLSTNQLQERLRK 167
DB 121 KKYFORITLYLTKKYSFCWAEVVRRAEIMRSFSLSTNQLQERLRK 166

RESULT 8

US-11-330-917-189
Sequence 189, Application US/11/330,917
Publication No. US20060182716A1
GENERAL INFORMATION:
APPLICANT: Hong, Jin
APPLICANT: Seiwert, Scott D.
APPLICANT: Blatt, Lawrence M.
TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
FILE REFERENCE: INTM-060WO
CURRENT APPLICATION NUMBER: US/11/330,917
CURRENT FILING DATE: 2006-01-11
PRIOR APPLICATION NUMBER: 60/600,202
PRIOR FILING DATE: 2004-08-09
PRIOR APPLICATION NUMBER: 60/600,134

```

Db 121 RKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQKLRKRD 166

RESULT 10
US-11-330-917-191
; Sequence 191, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 191
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-330-917-191

Query Match 90.2%; Score 777; DB 7; Length 166;
Best Local Similarity 90.4%; Pred. No. 1.5e-68;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWQSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQKLRKRD 166

RESULT 11
US-11-330-917-183
; Sequence 183, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 183

Query Match 90.2%; Score 777; DB 7; Length 166;
Best Local Similarity 90.4%; Pred. No. 1.5e-68;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWQSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQKLRKRD 166

RESULT 11
US-11-330-917-183
; Sequence 183, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 183

Query Match 90.2%; Score 777; DB 7; Length 166;
Best Local Similarity 90.4%; Pred. No. 1.5e-68;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWQSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQKLRKRD 166

RESULT 11
US-11-330-917-183
; Sequence 183, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 183

Query Match 90.2%; Score 777; DB 7; Length 166;
Best Local Similarity 90.4%; Pred. No. 1.5e-68;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWQSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQKLRKRD 166

RESULT 11
US-11-330-917-183
; Sequence 183, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 183

Query Match 90.2%; Score 777; DB 7; Length 166;
Best Local Similarity 90.4%; Pred. No. 1.5e-68;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWQSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQKLRKRD 166

RESULT 11
US-11-330-917-183
; Sequence 183, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Variants
; TITLE OF INVENTION: Oral Formulations and Methods of Using the Same
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330,917
; CURRENT FILING DATE: 2006-01-11
; PRIOR APPLICATION NUMBER: 60/600,202
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/600,134
; PRIOR FILING DATE: 2004-08-09
; PRIOR APPLICATION NUMBER: 60/604,280
; PRIOR FILING DATE: 2004-08-24
; PRIOR APPLICATION NUMBER: 60/604,415
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 183

Query Match 90.2%; Score 777; DB 7; Length 166;
Best Local Similarity 90.4%; Pred. No. 1.5e-68;
Matches 150; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 61
DB 1 CDLPQTHSLGNRRALLLAQWRRIISPFSCDKDRHDFGFPQEEFDGNQFOKQAISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWQSLEKFTYLYQQLNDLEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAWVEVRAEIMRSLSFSTNLQKLRKRD 16
```

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; LENGTH: 166
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-330-917-183

Query Match      90.1%; Score 776; DB 7; Length 166;
Best Local Similarity 90.4%; Pred. No. 1.9e-68;
Matches 150; Conservative 7; Mismatches 9; Indels 0; Gaps 0;

QY  2 CDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGFPQEEFDGNGFQKAAISVLHEM 61
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   1 CDLPQTHSLGNRRALILLGQGRISPFSCDKDRHDFRIPQEEFDGNGFQKAAISVLHEM 60
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

QY  62 IQQTFNLFSKDSAAWDESLLEKFTYELYYQLNDLEACVIOEVGVETPLMNVDSILAV 121
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   61 IQQTFNLFSKDSAAWDESLLEKFTYELYYQLNDLEACVIOEVGVETPLMNVDSILAV 120
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

QY  122 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSSTNLQRLRRKE 167
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   121 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSSTNLQRLRRKD 166
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

RESULT 12
US-11-136-115-78
; Sequence 78, Application US/11136115
; Publication No. US20060166225A1
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020501US
; CURRENT APPLICATION NUMBER: US/11/136.115
; PRIOR FILING DATE: 2005-05-24
; PRIOR FILING DATE: 1999-06-24
; PRIOR FILING DATE: 1999-06-24
; PRIOR FILING DATE: 1996-12-18
; PRIOR FILING DATE: 1996-12-18
; PRIOR FILING DATE: 1994-02-17
; PRIOR FILING DATE: 1994-02-17
; PRIOR FILING DATE: 1995-04-18
; PRIOR FILING DATE: 1995-04-18
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 78
; LENGTH: 166
; TYPE: PRT
; ORGANISM: human alpha interferon
US-11-136-115-78

Query Match      89.4%; Score 770; DB 7; Length 166;
Best Local Similarity 89.2%; Pred. No. 7.2e-68;
Matches 148; Conservative 9; Mismatches 9; Indels 0; Gaps 0;

QY  2 CDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGFPQEEFDGNGFQKAAISVLHEM 61
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   1 CNLSQTHSLNRRRTMLLAQMRRISPFSCDKDRHDFEFPQEEFDGNGFQKAAISVLHEM 60
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

QY  62 IQQTFNLFSKDSAAWDESLLEKFTYELYYQLNDLEACVIOEVGVETPLMNVDSILAV 121
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   61 MQQTFNLFSKNSAAWDETLLEKFTYELFQQMNDLEACVIOEVGVETPLMNVDSILAV 120
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

QY  122 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSSTNLQRLRRKE 167
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   121 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSSTNLQRLRRKD 166
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

RESULT 13
US-11-330-917-193
; Sequence 193, Application US/11330917
; Publication No. US20060182716A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Hong, Jin
; APPLICANT: Seiwert, Scott D.
; APPLICANT: Blatt, Lawrence M.
; TITLE OF INVENTION: Synthetic Hyperglycosylated, Protease-Resistant Polypeptide Varia
; FILE REFERENCE: INTM-060WO
; CURRENT APPLICATION NUMBER: US/11/330.917
; CURRENT FILING DATE: 2006-01-11
; PRIOR FILING DATE: 2006-01-11
; PRIOR FILING DATE: 2004-08-09
; PRIOR FILING DATE: 2004-08-09
; PRIOR FILING DATE: 2004-08-09
; PRIOR FILING DATE: 2004-08-24
; PRIOR FILING DATE: 2004-08-24
; PRIOR FILING DATE: 2004-08-24
; NUMBER OF SEQ ID NOS: 1354
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 193
; LENGTH: 166
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-330-917-193

Query Match      89.2%; Score 768; DB 7; Length 166;
Best Local Similarity 88.6%; Pred. No. 1.1e-67;
Matches 147; Conservative 10; Mismatches 9; Indels 0; Gaps 0;

QY  2 CDLPQTHSLGNRRALILLAQMRRISPFSCDKDRHDFGFPQEEFDGNGFQKAAISVLHEM 61
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   1 CNLSQTHSLNRRRTMLLAQMRRISPFSCDKDRHDFEFPQEEFDGNGFQKAAISVLHEM 60
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

QY  62 IQQTFNLFSKDSAAWDESLLEKFTYELYYQLNDLEACVIOEVGVETPLMNVDSILAV 121
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   61 MQQTFNLFSKNSAAWDETLLEKFTYELFQQMNDLEACVIOEVGVETPLMNVDSILAV 120
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

QY  122 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSSTNLQRLRRKE 167
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db   121 KKYFORITLYLTKKYSPCAWEVVRAEIMRFSLSSTNLQRLRRKD 166
    |:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

RESULT 14
US-11-136-115-77
; Sequence 77, Application US/11136115
; Publication No. US20060166225A1
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020501US
; CURRENT APPLICATION NUMBER: US/11/136.115
; CURRENT FILING DATE: 2005-05-24
; PRIOR FILING DATE: 1999-06-24
; PRIOR FILING DATE: 1999-06-24
; PRIOR FILING DATE: 1996-12-18
; PRIOR FILING DATE: 1996-12-18
; PRIOR FILING DATE: 1994-02-17
; PRIOR FILING DATE: 1994-02-17
; PRIOR FILING DATE: 1995-04-18
; PRIOR FILING DATE: 1995-04-18
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 77
; LENGTH: 166
; TYPE: PRT
; ORGANISM: human alpha interferon
US-11-136-115-77

Query Match      89.1%; Score 767; DB 7; Length 166;
Best Local Similarity 89.8%; Pred. No. 1.4e-67;
Matches 149; Conservative 8; Mismatches 9; Indels 0; Gaps 0;
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QY 2 CDLPQTHSLGNRRALILLAQMRRISPPSCLDKDRHDFGFPQBEFDGNGQFKQAQISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMGRISPPSCLDKDRDPDGLPQBEFDGNGQFKQAQISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDESLLKFTYELYQOLNDEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWESQSLLEKFTSTELYQOLNDEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAEVVRRAEIMRSFSLSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAEVVRRAEIMRSLSFSTNLQKILRRKD 166

RESULT 15

US-11-136-115-85
; Sequence 85, Application US/11136115
; Publication No. US20060166225A1
; GENERAL INFORMATION:
; APPLICANT: Patten, Phillip
; APPLICANT: Stemmer, Willem P.C.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING
; FILE REFERENCE: 02-020503US
; CURRENT APPLICATION NUMBER: US/11/136,115
; CURRENT FILING DATE: 2005-05-24
; PRIOR APPLICATION NUMBER: US/09/339,926
; PRIOR FILING DATE: 1999-06-24
; PRIOR APPLICATION NUMBER: 08/769,062
; PRIOR FILING DATE: 1996-12-16
; PRIOR APPLICATION NUMBER: 08/198,431
; PRIOR FILING DATE: 1994-02-17
; PRIOR APPLICATION NUMBER: 08/425,684
; PRIOR FILING DATE: 1995-04-18
; PRIOR APPLICATION NUMBER: 08/537,874
; PRIOR FILING DATE: 1995-10-30
; NUMBER OF SEQ ID NOS: 101
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 85
; LENGTH: 166
; TYPE: PRT
; ORGANISM: human alpha interferon
US-11-136-115-85

Query Match 89.1%; Score 767; DB 7; Length 166;
Best Local Similarity 89.8%; Pred. No. 1.4e-67;
Matches 149; Conservative 8; Mismatches 9; Indels 0; Gaps 0;

QY 2 CDLPQTHSLGNRRALILLAQMRRISPPSCLDKDRHDFGFPQBEFDGNGQFKQAQISVLHEM 61
DB 1 CDLPQTHSLGNRRALILLAQMGRISPPSCLDKDRDPDGLPQBEFDGNGQFKQAQISVLHEM 60
QY 62 IQOTFNLFSTKSSAAWDESLLKFTYELYQOLNDEACVIOEVGVETPLMNVDSILAV 121
DB 61 IQOTFNLFSTEDSSAAWESQSLLEKFTSTELYQOLNDEACVIOEVGVETPLMNVDSILAV 120
QY 122 KKYFORITLYLTKKYSPCAEVVRRAEIMRSFSLSTNLQERLRKE 167
DB 121 RKYFORITLYLTKKYSPCAEVVRRAEIMRSLSFSTNLQKILRRKD 166

Search completed: September 1, 2006, 13:32:31
Job time : 33 secs